

THE *Process* AND *Effects* OF
Mass Communication

REVISED EDITION

EDITED BY WILBUR SCHRAMM
AND DONALD F. ROBERTS

WITHDRAWN

University of Illinois Press
URBANA CHICAGO LONDON

Surry Community College Library
Dobson, North Carolina 27012

42-11415

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Manufactured in the United States of America
Library of Congress Catalog Card No. 74-152000

252 00197 4

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REVISED EDITION

Foreword to the Second Edition

Process and Effects was first published in 1954. It did not sell enough to make the University of Illinois Press rich, but it sold steadily. Through it many students—and, if we can believe our correspondence, many teachers and researchers also—were introduced to the great questions of how communication works and what it does. It was the steadiness of its sale and its use that led us to wait so long to revise it.

To return to a book like this after sixteen years is an illuminating experience. During that time more communication research has been published than in the whole history of communication study before 1954. Perhaps the chief theoretical changes in that period were the demise of the so-called “bullet theory” (direct effect of mass communication), the rise of a new and more realistic concept of the audience, and a revision of the formerly postulated relationships between mass and interpersonal communication. New dynamic models of communication effect, like consistency theory, had come into wide use. And important inputs had been made to communication theory and method from some of the great field laboratories where communication is being used and studied—in political campaigns, for example, in economic and social development, the effect of television on children, and the like. The challenge of revising *Process and Effects* was to represent adequately the enormous outpouring of research and theory during the most productive decade and a half of communication study.

So this new edition is really a new book, made, in the spirit of the old one, by a member of the new generation and a member of the older generation of communication scholars. Only four articles remain from the 1954 edition. Yet we have found it neither possible nor desirable to eliminate all “classical” articles in favor of new ones. For one thing, most of the new re-

search has advanced knowledge an inch at a time along previously set paths, and it is not always easy to find recent articles with the breadth and depth of some of the older ones. We feel that even so venerable a paper as Walter Lippmann's "The World Outside and the Pictures in Our Heads," which was published in 1922, still belongs in the required reading of a student of communication process and effects. The Lazarsfeld-Merton article on "Mass Communication, Popular Taste, and Organized Social Action," the Lasswell paper on structure and function (1948), the Langs' study of the selective process of mass communication (1952), and the Freidson paper redefining the mass audience (1953), among others, are still worth the close attention of communication students in the 1970's.

The 1971 edition of *Process and Effects* is therefore a combination of old classics, new classics, and reports on "state of the art" in important areas of communication study. It also looks at some of the new media that lie just over the horizon.

We are indebted to many people who have helped make this new edition. Chief among them of course are the scholars who have permitted us to reprint their work. Mrs. Linda Miller has typed quantities of manuscript with her customary skill and care. Our colleagues in the Institute for Communication Research have given freely of advice when asked. And the University of Illinois Press has proved itself, as usual, helpful, supportive, and pleasant to work with. Of course the only way the editors can say thanks adequately to these persons is by making this new edition at least as useful as the first edition. This we very much hope we have accomplished.

Wilbur Schramm
Donald F. Roberts

STANFORD, 1971

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I

*The Nature of
Communication between Humans*

WILBUR SCHRAMM

IN 1952 I WROTE A PAPER entitled "How Communication Works" ¹ which was published as the first chapter of the first edition of this book. Now, after eighteen years during which a great deal has happened in communication study, it seems fitting to take another look at that topic.

More than half of all the research ever conducted on human communication has become available only in the last eighteen years. Most of the organizations now engaged primarily in communication research are less than eighteen years old. Most of the great laboratories for studying human communication—election campaigns, the effects of television, diffusion of information and adoption of new practices, information storage and retrieval, and the use of mass media in economic and social development, to name a few of them—have been worked intensively only in the last eighteen years. Since 1952 there has been added to our libraries much of the work of Carl Hovland and his associates in the Yale study of communication and attitude change; Charles Osgood and his associates at Illinois, on the empirical study of meaning; Paul Lazarsfeld and his associates at Columbia, on the study of interpersonal as related to mass communication; Festinger, Katz, McGuire, and others on dissonance theory, consistency theory, and other psychological processes related to communication; Pool, Deutsch, Davison, and

So many people have contributed criticism and helpful suggestions to this paper that it would be infeasible to thank them all by name. I should like to mention especially, however, the detailed and insightful criticism given by my colleague and former student, Thomas Cook, of Northwestern University. He is responsible for many of the good things in the paper, and for none of the bad ones.

¹ Wilbur Schramm, "How Communication Works," in *The Process and Effects of Mass Communication* (Urbana: University of Illinois Press, 1954), pp. 3-26.

others on international communication; Newcomb, Asch, Sherif, Leavitt, Bavelas, and others on groups and group processes as related to communications; Miller, Cherry, and others, applying Claude Shannon's mathematical theory of communication to human communication problems; Berelson, Holsti, and others on content analysis; Miller and others on system theory; Carter on orientation; Chomsky and others on language; May, Lumsdaine, and others on learning from the mass media.² During this time communication study has moved so fast that it has seldom stood still for its portrait, but with so much activity and so many able scholars in the field it would be strange if the picture in 1970 were precisely the same as in 1952.

The difficulty in summing up a field like human communi-

² Examples of the literature referred to are: C. I. Hovland, I. Janis, and H. Kelley, *Communication and Persuasion* (New Haven: Yale University Press, 1953); C. I. Hovland, "The Effects of the Mass Media of Communication," in G. Lindzey, ed., *Handbook of Social Psychology* (Reading, Mass.: Addison-Wesley, 1954); C. I. Hovland and M. J. Rosenberg, *Attitude Organization and Change* (New Haven: Yale University Press, 1960); C. E. Osgood, G. Suci, and P. Tannenbaum, *The Measurement of Meaning* (Urbana: University of Illinois Press, 1957); E. Katz and P. F. Lazarsfeld, *Personal Influence* (Glencoe, Ill.: The Free Press, 1955); L. Festinger, *A Theory of Cognitive Dissonance* (New York: Harper, 1957); D. Katz, "The Functional Approach in the Study of Attitudes," *Public Opinion Quarterly* 24 (1960): 163-204; W. McGuire, "Attitudes and Opinions," in *Encyclopedia of the Social Sciences*, 2nd ed. (in press); T. Newcomb, "Attitude Development as a Function of Reference Groups: The Bennington Study," in Maccoby, Newman, and Hartley, eds., *Readings in Social Psychology* (New York: Henry Holt, 1958), pp. 265-75; S. E. Asch, "Effects of Group Pressure upon the Modification and Distortion of Judgments," *ibid.*, pp. 174-83; M. Sherif, "Group Influences upon the Formation of Norms and Attitudes," *ibid.*, pp. 219-25; H. Leavitt, "Some Effects of Certain Communication Patterns of Group Performance," *ibid.*, pp. 546-50; G. A. Miller, *Language and Communication* (New York: McGraw-Hill, 1951); C. Cherry, *On Human Communication* (Cambridge, Mass.: Technological Press and Wiley, 1957); C. Shannon and W. Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949); B. Berelson, *Content Analysis in Communication Research* (Glencoe, Ill.: The Free Press, 1952); O. Holsti, "Content Analysis," in Lindzey and Aronson, eds., *Handbook of Social Psychology*, 2nd ed. (Reading, Mass.: Addison-Wesley, 1968), vol. 2, pp. 596-692; M. May and A. A. Lumsdaine, *Learning from Films* (New Haven: Yale University Press, 1958); B. Berelson, P. F. Lazarsfeld, and W. McPhee, *Voting* (Chicago: University of Chicago Press, 1954); H. Himmelweit, A. N. Oppenheim, and P. Vince, *Television and the Child* (London: Oxford, 1958); D. Lerner, *The Passing of Traditional Society* (Glencoe, Ill.: The Free Press, 1958).

cation is that it has no land that is exclusively its own. Communication is the fundamental social process. This was recognized many years ago by Edward Sapir, when he wrote an article, for the first edition of the *Encyclopedia of the Social Sciences*, that is still fresh and insightful.

It is obvious that for the building up of society [he said], its units and subdivisions, the understandings which prevail between its members, some processes of communication are needed. While we often speak of society as though it were a static structure defined by tradition, it is, in the more intimate sense, nothing of the kind, but a highly intricate network of partial or complete understandings between the members of organizational units of every degree of size and complexity, ranging from a pair of lovers or a family to a league of nations or that ever increasing portion of humanity which can be reached by the press, through all its transnational ramifications. It is only apparently a static sum of social institutions; actually, it is being reanimated or creatively affirmed from day to day by particular acts of a communicative nature which obtain among individuals participating in it. Thus the Republican party cannot be said to exist as such, but only to the extent that its tradition is being constantly added to and upheld by such simple acts of communication as that John Doe votes the Republican ticket, thereby communicating a certain kind of message, or that a half dozen individuals meet at a certain time or place, formally or informally, in order to communicate ideas to one another and eventually to decide what points of national interest, real or supposed, are to be allowed to come up many months later for discussion in a gathering of members of the party. The Republican party as a historical entity is merely abstracted from thousands upon thousands of such single acts of communication, which have in common certain persistent features of reference. If we extend this example into every conceivable field in which communication has a place we soon realize that every cultural pattern and every single act of social behavior involve communication in either an explicit or implicit sense.³

³ E. Sapir, "Communication," in *Encyclopedia of the Social Sciences*, 15 vols., 1st ed. (New York: Macmillan, 1930-35).

Thus every discipline concerned with human society and human behavior must necessarily be concerned with communication. It is no accident that the research mentioned at the beginning of this paper has involved psychologists, sociologists, anthropologists, political scientists, economists, linguists, educators, mathematicians, and engineers, as well as the comparatively small group of individuals who think of themselves primarily as communication scholars. This is salutary because the methods and insights of all these disciplines can be brought to bear on the study of communication, but on the other hand it requires any student of communication to look in many places for his basic material. A student of pre-Cambrian geology, to take a contrasting example, can be reasonably sure that the chief papers in his field will be written by geologists, that they will be listed together and will build one on another; but a student who wants to comprehend the sum total of existing knowledge of human communication must search at least half a dozen scholarly fields, and he can be fairly sure that the articles will go off in many directions and will not all build one on another. This is one of the reasons why a unified and systematic theory of human communication has been slow to emerge.

It would be pleasant to be able to report that eighteen years of such broadening interest and effort have coalesced into a simpler, clearer model of communication. This is not the case. "How Communication Works," written in 1970, has to be more complex, and require more qualifications, than in 1952. This is no reason to be discouraged with the progress of the field: sciences often grow in an accordion pattern. Consider, for example, the alternating simplifications and complications in the history of natural science as it has been forced to discard in turn the idea that earth, air, fire, and water are the basic elements, the idea of ether, the idea that atoms and molecules are the basic building blocks of matter, and finally—so it seems—the idea that the same physical laws that govern superatomic relations also govern the subatomic universe. But the fact remains that human communication seemed a simpler thing in 1952 than it does in 1970. At that time we felt we had a fairly

adequate comprehension of the process and its social uses. We counted on S-R psychology, when the intervening variables were properly defined, to explain most of the effects. The study of audiences in terms of social categories promised to explain most of the variance in response to communication. The tools of content analysis, interviews, and sample surveys promised to give us a good idea of what was getting through. The study of attitudes promised to give us a predictor of action. We felt that Shannon's information theory was a brilliant analogue which might illuminate many dark areas of our own field. Already, at that time, the complicating questions were being asked: Why did the mass media apparently change so few votes in election campaigns? Why did people of the same social categories (education, class, and so forth) still react so differently to the same communication? Why was field survey data on communication effects so different from laboratory data? Why was a change in verbally expressed attitudes so seldom followed by observed action in those directions? How did a man's group relationships enter into the way he used communication and the effect of communication on him? Questions like these were being asked in 1952, and tentative answers were being given, but I fear we did not realize at that time how difficult and tortuous were the paths down which those questions would lead us.

In the middle of change it is hard to sum up change. Yet I should like to suggest some directions of change that I perceive.

For one thing, neither the psychological nor the social model of the communication process is any longer sufficient by itself. Rather, they must be combined and somehow comprehended together. The social aegis under which the message comes, the receiver's social relationship to the sender, the perceived social consequences of accepting it or acting upon it, must be put together with an understanding of the symbolic and structural nature of the message, the conditions under which it is received, the abilities of the receiver, and his innate and learned responses, before we can predict with any real confidence the consequences of an act of communication. This somewhat com-

plicates the models we were accustomed to drawing fifteen years ago, and yet there is ample evidence that such complication is necessary.

In the second place, communication has come to be thought of as a relationship, an act of sharing, rather than something someone does to someone else. So far as I know, "How Communication Works" was the first general essay on communication to use the concept of "sharing" information; this was in part a reaction against the mechanistic psychology much in use at the time to explain communication effects, and against the irrational fears of propaganda being expressed in the early 1950's. Indeed, the most dramatic change in general communication theory during the last forty years has been the gradual abandonment of the idea of a passive audience, and its replacement by the concept of a highly active, highly selective audience, manipulating rather than being manipulated by a message—a full partner in the communication process.

To appreciate the magnitude of this change, one must recall how frightening World War I propaganda, and later Communist and Nazi propaganda, were to many people. At that time, the audience was typically thought of as a sitting target; if a communicator could hit it, he would affect it. This became especially frightening because of the reach of the new mass media. The unsophisticated viewpoint was that if a person could be reached by the insidious forces of propaganda carried by the mighty power of the mass media, he could be changed and converted and controlled. So propaganda became a hate word, the media came to be regarded fearfully, and laws were passed and actions taken to protect "defenseless" people against "irresistible" communication. This was the origin of many propaganda studies, and one of the reasons why content analysis of propaganda was developed to such a high point by Harold Lasswell and his associates.

I have elsewhere called this the Bullet Theory of communication. Communication was seen as a magic bullet that transferred ideas or feelings or knowledge or motivations almost automatically from one mind to another. Thus, for example, the *Columbia Encyclopedia* has defined communication as "the

transfer of thoughts," even though that idea has been out of date for many years: it is *messages*, not ideas or thoughts, that pass from communicator to receiver. To sum up, then, in the early days of communication study, the audience was considered relatively passive and defenseless, and communication could *shoot something into them*, just as an electric circuit could deliver electrons to a light bulb.

But scholars began very soon to modify the Bullet Theory. It did not square with the facts. The audience, when it was hit by the Bullet, refused to fall over. Sometimes the Bullet had an effect that was completely unintended. For example, in the Mr. Biggott experiment when prejudiced people were fed anti-prejudice propaganda, they actually used it to reinforce their existing prejudices.⁴

The first major step in explaining why different people reacted so differently to the same communication was taken when sociologists developed what might be called the Category Theory. Advertisers can be chiefly thanked for this, because the need to measure audiences and tailor commercial messages for them led to impressive financial support for audience studies, and it became necessary to find a simple and usable way of classifying audiences in terms of the media content they selected and the goods they were interested in buying. It became quickly apparent that most college-educated people had different tastes from those of elementary-school graduates, young people from old, males from females, city people from rural people, rich from poor, and so forth. As the theory became more subtle, it was found that people who held different clusters of attitudes or beliefs would choose differently and react differently from those who held different clusters. As the theory was examined still more carefully, it became apparent that the groups people belonged to had something to do with their communication habits, and these memberships led them to choose and react to messages in such a way as to defend the common norms of the groups they value. A great deal of interpersonal communication was seen to be involved in any change

⁴E. Cooper and M. Jahoda. "The Evasion of Propaganda." *Journal of Psychology* 23 (1947): 15-25.

of taste, values, or opinions. For example, people would consult other members of their groups as to how they should interpret, or respond to, messages they received. Finally, this line of thinking led to some devaluation of the power of the mass media, and to a resurgence of the belief that personal communication was responsible for most social control. This position was developed powerfully by Paul Lazarsfeld and his pupils and associates at Columbia.

Trying to explain the differences in what people learned from communication, psychologists who were studying communication and attitude change—notably Carl Hovland and his associates at Yale—began to isolate the active variables in the process. They found that experience and personality differences in members of an audience were extremely important. For example, the I.Q. of a receiver, his authoritativeness or permissiveness, and the responses he had learned to make, were even more powerful than the categories he belonged to, in predicting his reactions to a message. Hovland and his associates also isolated many of the content variables in a message—for example, two-sided vs. one-sided presentation, or primacy vs. recency—and when these were set against individual difference variables it became possible to make some sharp predictions of effect.

Thus by the middle 1950's the Bullet Theory, if you will pardon the expression, had been shot full of holes. If anything really passed from sender to receiver, it certainly appeared in very different form to different receivers. And the audience was far from a sitting target.

Raymond Bauer gave a name to the frustration of psychologists and sociologists in trying to apply the old mechanistic theory of communication when he wrote about "The Obstinate Audience."⁵ The Zimmerman-Bauer experiment contributed further to the idea of an obstinate and active audience by showing that what people select from communication, and what they remember, often depends on the use they expect to

⁵ R. Bauer, "The Obstinate Audience," *American Psychologist* 19 (1964): 319-28.

have to make of the content. The audience simply would not act like a target!

In recent decades, therefore, we have come to believe that the intervening steps between communication stimulus and response are less simple than they had generally been considered. We had been concerned with "getting the message through," getting it accepted, getting it decoded in approximately the same form as the sender intended—and we had undervalued the activity of the receiver in this process. We had tended to undervalue the importance of the psychological processes that might be triggered by present and stored perceptions of social relationships and role patterns, in such a way as to enter into the response to any communication. Without such complicating concepts we could never explain why the anti-cigarette campaign was not initially more effective, why adoption of new practices proceeds as it does, why violence on television sometimes may and sometimes may not stimulate violence in the behavior of its viewers, and why a failure in prophecy might have the effect it does on members of a cult.

Thus we have come 180 degrees from a theory of the passive audience to a theory of an active audience. I shall suggest, later in this paper, that it is now necessary to think of the communication process as two separate acts, one performed by a communicator, one by a receiver, rather than as a magic bullet shot by one into the other.

Since 1952, we have a renewed interest in dealing with the communication process as a whole. We have gained new insights into audience behavior. We have new linguistic and conceptual tools for dealing with the message, as well as computers for simplifying the drudgery of content analysis. We have a greater interest in learning why communicators do what they do, as well as a beginning of system models to describe how a society, organization, or other group affects the performance of its communicators at the same time as it is affected by them. This concept of mutual causation has helped us to understand many communication patterns. For example, the mass media contribute to changes in taste, and audience feedback contrib-

utes to changes in program policy; policies change public opinion and public opinion changes policies; persuasion changes attitudes, which can change behavior, which reinforces attitude change; economic development brings about increases in communication and communication facilities, which bring about increases in economic development; and so forth. These ideas of communication as a relationship (rather than a target-shoot) and an *interaction* (rather than an action) now require us to fill in some neglected areas in the process.

So much for changes. Now, where do we stand?

What Is Communication?

Here are some representative definitions:

Communication—the imparting, conveying, or exchange of ideas, knowledge, etc. (whether by speech, writing, or signs). —*Oxford English Dictionary*.

Communication—the transfer of thoughts and messages, as contrasted with transportation, the transfer of goods and persons. The basic forms of communication are by signs (sight) and by sounds (hearing). —*Columbia Encyclopedia*.

In the most general sense, we have *communication* whenever one system, a source, influences another, the destination, by manipulation of alternative signals which can be transmitted over the channel connecting them. —Charles E. Osgood, *A Vocabulary for Talking about Communication*.

The word *communication* will be used here in a very broad sense to include all the procedures by which one mind may affect another. This, of course, involves not only written and oral speech, but also music, the pictorial arts, the theatre, the ballet, and in fact all human behavior. In some connections it may be desirable to use a still broader definition of communication, namely one which would include the procedures by means of which one mechanism (say automatic equipment to track an airplane and to compute its probable future positions) affects another mechanism (say a guided missile chasing this airplane). —Claude Shannon and Warren Weaver, *The Mathematical Theory of Communication*.

The mechanism through which human relations exist and develop—all the symbols of the mind, together with the means of conveying them through space and preserving them in time.
—Charles Cooley.

Each of these definitions has its own strength and its own usefulness. The first two are based on the idea of transfer of information; they distinguish between the transfer of ideas, knowledge, thoughts, and messages, and the transfer of more material things. The third and fourth definitions rest on the idea of influence or effect, rather than a transfer of anything. Notice that they do not limit the nature of the message to anything but "signals." The fifth definition is noteworthy for its emphasis on human relationship.

Today we might define communication simply by saying that it is the sharing of an orientation toward a set of informational signs.

Information, in this sense, we must define very broadly. Obviously it is not limited to news or "facts" or what is taught in the classroom or contained in reference books. It is any content that reduces uncertainty or the number of alternative possibilities in a situation. It may include emotions. It may include facts or opinion or guidance or persuasion. It does not have to be in words, or even explicitly stated: the latent meanings, "the silent language," are important information. It does not have to be precisely identical in both sender and receiver—we doubt that it ever is, and we are unlikely to be able to measure that correspondence very completely anyway. The ancient idea of transferring a box of facts from one mind to another is no longer a very satisfactory way of thinking about human communication. It is more helpful to think of one or more people or other entities coming to a given piece of information, each with his own needs and intentions, each comprehending and using the information in his own way.

Communication is therefore based on a *relationship*. This relationship may exist between two persons, or between one person and many. In the sense that Sapir talked of groups and organizations in the passage we quoted, communication may take

place between a group and an individual, a collective society and an individual, or a society and a group or organization. Animals communicate (although, as we shall point out later, in a somewhat more limited way than do humans), and communication takes place between humans and animals. Humans communicate quite successfully with machines (e.g., computers); and machines, as Shannon points out in his definition, can communicate effectively with each other within the limits of capability designed into them. The essence of this relationship is being "in tune" with each other, focusing on the same information. This central element of the communication relationship is usually embedded in certain social relationships that contribute to the use and interpretation of the information. A lover and his lass, sitting under a full moon, are in a social relationship which is likely to contribute certain emotional content and meaning to anything that is said. An audience in a theater is likely to engage in a willing suspension of disbelief in a way that it would never do if it were face to face with the same actor over a business deal. A man reading his newspaper is likely to come to this relationship each day with certain expectations and a certain degree of confidence different from those he would bring, let us say, to a letter from a stranger. A teacher and a student, a father and a son, an employer and employee, members of a football team, two nuns from the same order—all these are obviously in a social relationship that will in some way color any communication between them.

This relationship does not have to be face to face. Cooley's definition speaks of the means of conveying symbols through space and preserving them in time. Thus the mass media make communication possible over great distances: they are simply machines put into the communication process to duplicate man's writing (the printing press) or to extend his senses of sight and hearing (television, films, radio). Similarly, signs and symbols from the past may result in communication, as all of us know who have experienced Chartres cathedral, or the *Iliad*, or the third symphony of Beethoven. But it is obvious that there is a difference in quality between the communication relationships that are close and direct, and those that are removed in

time or space. There can hardly be two-way communication with Homer, and the feedback even to a local newspaper or television station is very faint. Given the right situation, these distant communications may have very powerful results; indeed, one of the reasons great books survive and mass media continue to exist is that they have the power to "tune in" with audiences at a distance. Communications of far lower power, and far lower cost, can be effective when two people are together interacting. Other things being equal, if we want to persuade, or teach, or understand, or reach an agreement with someone, we are more likely to be able to do it face to face.

But whether face-to-face or mediated, whether immediate or removed in time or space, the communication relationship includes three elements and two kinds of action. The elements are the communicator, the message, and the receiver.

It is no longer necessary to defend the idea that the message has a life of its own, separate from both the sender and receiver. If anyone questions this, let him remember how he feels when he has put a letter into the mailbox and wishes he could recall it to make a change. But it is out of his control, just as though he were a general who had sent his army into battle without him and had to wait for reports from the front to find out whether they had followed his commands, how the opposing army had reacted, and what had been the result of the battle. The message exists as a sign or a collection of signs with no meaning of their own except that which cultural learning enables a receiver to read into them. Thus the Rosetta Stone, Cretan Linear B, and certain Mayan records were all meaningless until scholars could recreate the culture sufficiently to be able to read them. Furthermore, the meaning is probably never quite the same as interpreted by any two receivers, or even by sender and receiver. The message is merely a collection of signs intended to evoke certain culturally learned responses—it being understood that the responses will be powerfully affected by the cultural experience, the psychological makeup, and the situation of any receiver.

The communicator constructs, as best as he can, the signs which he hopes will call forth the desired responses—whether

verbal or nonverbal, auditory, visual, or tactile. That is the first act of the communication process. A receiver selects among the stimuli available to him, selects from the content of the message he chooses, interprets it and disposes of it as he is moved to do. That is the second act of the process. The acts are separate, separately motivated, but brought together by the collection of signs we call the message.

If we want an analogy to this process, we can find something much closer than a communicator shooting a magic bullet into a receiver, or a mass medium spraying magic bullets into an audience. It is possible to think in the more homely terms of a wife cooking dinner and placing it on the table for her husband. He takes what he wants. He may not like something she cooks. He may be feeling ill or tired, and consequently eat little or nothing. The situation being what it is, he will probably eat a good dinner. But the point is, *he* is in control of the situation after the food is set out for him. It takes *both* the act of a cook and the act of a diner to make a dinner party.

Let us call up a similarly homely analogy for what happens in mass communication.

I know a baker in southern Asia who gets up at dawn every morning to bake goods for sale. He can't force them on anyone—there is no parallel to the Magic Bullet here! All he can do is display his wares. He chooses a place where he knows crowds will pass. He bakes things of a kind he has found many people like. He tries to display them attractively. Then it is up to the patrons. The crowds move past. Some passersby will see the cakes and breads; some will not. Some will be hungry and looking for food; others, not. Some will be looking specifically for cakes or bread; others, not. Some, because they have bought good wares from this specific baker in the past, will be looking for his stand especially; others, not. Some will see the cakes, find their appetites stimulated, and reach in their pockets for coins; and they may or may not find any. And if they buy, they may or may not eat any or all of what they buy; they may or may not eat it with jam; they may or may not taste it and throw it away.

This is a closer analogy to the way we see the process of communication now.

Let us understand clearly one thing about it: communication (*human* communication, at least) is *something people do*. It has no life of its own. There is no magic about it except what people in the communication relationship put into it. There is no meaning in a message except what the people put into it. When one studies communication, therefore, one studies people—relating to each other and to their groups, organizations, and societies, influencing each other, being influenced, informing and being informed, teaching and being taught, entertaining and being entertained—by means of certain signs which exist separately from either of them. To understand the human communication process one must understand how people relate to each other.

What Does It Do?

What people do with communication is not easy to catalog or classify. Let us take a few examples from everyday communication.

(1) A professor thinks over what to say in tomorrow's lecture. He reviews the topic. What points should he be sure to make? What items should he select to mention? What position should he take on one of the disputed questions included in the topic? He weighs the arguments on each side. Is this communication, even though two parties are not involved? It is very hard to say that it is not. An individual is talking to himself—and listening to himself. Much of the life of the mind is lived this way.

(2) An individual says "Good morning!" to another. He is communicating nothing about the quality of the morning, but rather a message of friendliness. Beyond that, he is following an accepted ritual which reaffirms that he and the person to whom he speaks both belong to the same culture and that the mores are being observed. He is saying, in effect, "9 A.M. and all's well!"

(3) An individual reads the morning paper. He is informing himself about the changes in his environment, absorbing such persuasion from editors and columnists as he is willing to accept, being entertained by the cartoons and some of the feature stories. But that is not all. As Berelson has shown, he may be performing a ritual that helps prepare him to face the day, going through the morning task of relating himself again to the world of business and politics, perhaps hiding behind the paper to keep from having to talk.⁶

(4) A young man says to a pretty girl at a cocktail party, "Cigarette?" On the surface he is inviting her to smoke one of his cigarettes. Beyond that he is communicating interest, and inviting her to respond in the same way. If she responds favorably, the next step is likely to be some such question as, "Haven't I seen you somewhere?" which also indicates little concern over whether he has seen her but more interest in whether this casual grouping might become a longer lasting one.

(5) "Go get 'em, team!" a coach shouts as his football players run out for the kickoff. This might be classified as persuasion or instruction, but really it is intended to recall to them the norms of their functioning group: to run hard, tackle hard, win the game if possible for old So and So.

(6) "Dangerous curve—30 miles an hour," the sign reads. The motorist slows down to 35. An agency of the government has communicated to him some advice and a concern for his safety; he has responded in a way that shows the degree of confidence learned from previous experience with such advice. If there is a radar camera around, it communicates that expression of confidence back to the state highway department.

(7) The reading lesson in the third grade is the story of Washington crossing the Delaware. What is being communicated to the pupils? The countless little feedbacks, corrections, and instructions that help them to learn the skill of reading. Beyond that, some facts in history, and the enjoyment of a good

⁶ B. Berelson, "What 'Missing the Newspaper' Means," in P. F. Lazarsfeld and F. Stanton, *Communications Research, 1948-49* (New York: Harper, 1949), pp. 111-29.

story. Beyond that, the norms of patriotism and self-sacrifice.

Even this handful of examples will suggest that messages very seldom have a single purpose, and that very often the manifest content is not the important content at all. It is not entirely flippant to say that communication does what an individual or group or society needs at any given time to relate itself to parts of its environment. Communication is the great relating tool. It relates individuals to each other, making it possible for groups to function and for societies to live together harmoniously. It relates an artist or entertainer to his audience, a teacher to his students, a leader to his people. Wherever opportunity offers or danger threatens, there we find a great increase in communication. Recall the enormous flow of communication generated by the Gold Rush, the great wars of this century, the assassination of President Kennedy.

Bearing in mind that the basic function of most communications is relating people to each other or to groups, and that their latent content may be more significant than what they manifest, still we can classify a very large part of social communication under a few headings like these:

from the SENDER'S viewpoint	from the RECEIVER'S viewpoint
the objective of communication may be to:	
1. Inform	1. Understand
2. Teach	2. Learn
3. Please	3. Enjoy
4. Propose or persuade	4. Dispose or decide

These are not far from Harold Lasswell's catalog⁷ of the functions of social communication—surveillance, consensus, socialization—as we can see by looking at them from the viewpoint of society as contrasted with that of individuals:

⁷ H. Lasswell, "The Structure and Function of Communication in Society," in E. Maysen, ed., *The Communication of Ideas* (New York: Harper, 1944), pp. 37-51.

viewed SOCIALLY	viewed INDIVIDUALLY
the objective of communication may be to:	
1. Share common knowledge of environment	1. Test or expand picture of reality, learn of opportunities and dangers
2. Socialize new members of society to play their roles and abide by norms and customs	2. Acquire skills and knowledge necessary to live comfortably in society
3. Entertain members, distract them from troubles and dissatisfactions, create artistic form	3. Enjoy, relax, sometimes escape from real problems, sometimes gain oblique insight into them
4. Gain working consensus on policy, win allies or followers, control behavior and disperse resources in desired direction	4. Reach decisions where choice available, take action on informed basis, behave in socially desirable way

I do not mean to suggest that the sender's and the receiver's objectives, or the social and the individual goals, are always so neatly parallel as they may seem to be in the preceding charts. Actually the uses to which the same message is put may vary greatly from person to person, and any message may have multiple functions for the same receiver. Thus, for example, not all the audience will use an entertainment message simply for enjoyment. The women who listened to radio soap operas, it was discovered, made widely different uses of the content.⁸ Some used it to identify with the heroine and draw vicarious pleasure from her strength and fine character; others, to reinforce their view of woman's hard life and man's weakness and perfidy; still others, for advice as to how to solve some of their own problems. Thus any message may be functional in different ways, a concept that helps us especially to understand the varied effects of mass media.

⁸ H. Herzog, "What We Really Know about Daytime Serial Listeners," in P. F. Lazarsfeld and F. Stanton, eds., *Radio Research, 1942-43* (New York: Duell, Sloan, and Pearce, 1944), pp. 3-33.

Mass media came into the patterns of communication when science and industry created machines like the printing press, the camera and the motion picture, radio and television, to extend man's senses and expand his ability to duplicate signs. Society built around these new machines and around centers of information like the school and the government a number of very large social institutions to carry out many of the tasks which used to be handled by individuals. These new institutions have not replaced interpersonal communication; they

COMMUNICATION TASK	TRADITIONAL SOCIETY	MODERN SOCIETY Interpersonal	MODERN SOCIETY Mass Pattern
1. Share knowledge of environment	Watchman	Informed person	News media
2. Socialize new members	Parent or tribal elder	Parent, older children, professional teacher	School system, publishing, educational media
3. Entertain	Dancer, ballad singer, storyteller	Storyteller, artists of all kinds	Entertainment industry, including entertainment media and publishing
4. Gain consensus, persuade, control	Tribal chief or council	Influential leader, salesman, agitator	Government, and all the organizational and media structure for forming public opinion and exerting social control, including advertising and propaganda

have merely supplemented and extended it. Thus, when society consisted of primitive tribes struggling against the cold and the dangers of the environment, a watchman would be stationed on the hill to send back word when food animals or hostile warriors were in sight. In modern society much of this task has been delegated to the news media, with their staffs of reporters, correspondents, editors, wire services, and facilities for printing and broadcasting—but much information still travels interpersonally. This development is outlined on p. 21.

From the watchman on the hill to the color television news-cast relayed by a satellite, however, the tasks of human communication have remained essentially the same. Basically communication remains the instrument of human relations, the remarkable device which makes it possible for organisms to live and work and play together; and also, unfortunately, sometimes for groups to malfunction and societies to destroy themselves.

How Does It Work?

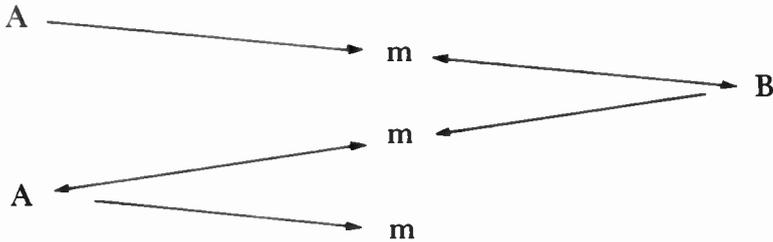
Essentially the communication process consists of information-processing organized around a shared orientation to certain signs. Ordinarily this requires two or more participants, but as we have pointed out it can take place within the thought processes of an individual. However, most writers about communication have chosen to concentrate on the situation in which one individual processes information in the forms of signs which he hopes will come to the attention of another individual. This has typically been diagrammed in this way:



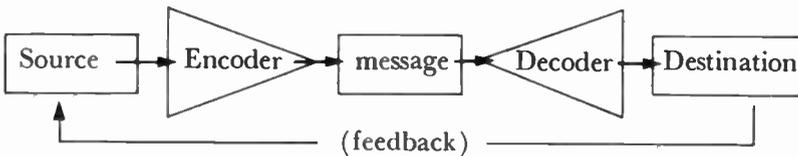
and we can accept it as a time analogue of the process, if we keep in mind that nothing really passes from A to B, but rather that A encodes a message as best he can in signs, and that B reads a message into those signs. In other words it is just as meaningful to say that B acts on the signs, as that they act on B, and it might be better to diagram it thus:



Similarly, we might represent the successive acts that constitute the interaction in this way:



Shannon,⁹ in his engineering model, represents the interaction, with the aid of a feedback link, in this manner:



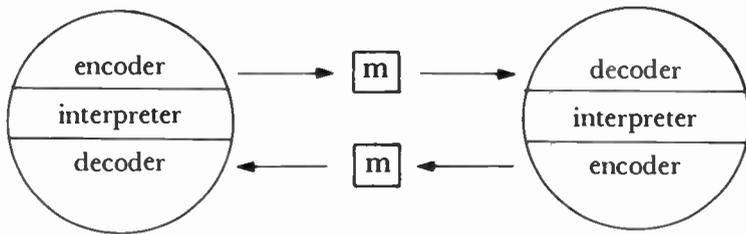
This has a sound basis in electronics, and is a useful analogy to what must happen when information passes between humans, which Wendell Johnson describes in this way:

1. An event occurs . . .
2. which stimulates Mr. A through eyes, ears, or other sensory organs, and the resulting
3. nervous impulses travel to Mr. A's brain, and from there to his muscles and glands, producing tensions, preverbal "feelings," etc.,
4. which Mr. A then begins to translate into words according to his accustomed verbal patterns, and out of all the words he "thinks of"
5. he "selects," or abstracts, certain ones which he arranges in some fashion, and then
6. by means of sound waves and light waves, Mr. A speaks to Mr. B,

⁹C. Shannon and W. Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949).

7. whose ears and eyes are stimulated by the sound waves and light waves respectively, and the resulting
8. nervous impulses travel to Mr. B's brain, and from there to his muscles and glands, producing tensions, preverbal "feelings," etc.,
9. which Mr. B then begins to translate into words, according to *his* accustomed verbal patterns, and out of all the words *he* "thinks of"
10. he "selects," or abstracts, certain ones, which he arranges in some fashion and then Mr. B speaks, or acts, accordingly, thereby stimulating Mr. A—or somebody else—and so the process of communication goes on, and on. . . .¹⁰

Osgood has preferred to schematize the process like this, emphasizing that each participant both receives and sends messages, encodes and decodes messages and interprets them:¹¹



Another useful model of this general kind is that of Westley and MacLean.¹² But rather than proliferate models, let us talk about the process for which they are shorthand.

However we may choose to draw a diagram of human communication, we must remember that the process itself is more complicated than any picture or description of it which we are likely to put down. Most of the communication process is in the "black box" of the central nervous system, the contents of

¹⁰ W. Johnson, "The Communication Process and General Semantic Principles," in W. Schramm, ed., *Mass Communication* (Urbana: University of Illinois Press, 1960) pp. 307-15.

¹¹ See C. E. Osgood, *A Vocabulary for Talking about Communication* (Urbana, Ill., n.d.).

¹² B. Westley and M. MacLean, "A Conceptual Model for Communications Research," *Journalism Quarterly* 34 (1957): 31-38.

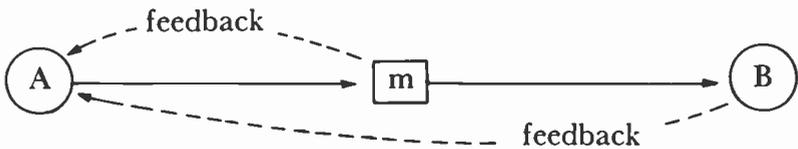
which we understand only vaguely. When we describe communication, we are therefore dealing with analogies and gross functions, and the test of any model of this kind is whether it enables us to make predictions—not whether it is a true copy of what happens in the black box, a matter of which we cannot now speak with any great confidence.

Two other notions get into most of these analogic descriptions of the communication process: feedback, and noise. To talk about these we must say something about the nature of the message.

As we have noted, a remarkable characteristic of all communication (except that accomplished by physical contact, such as a handshake or a pat on the head) is that the message is at some point in the process quite separate from either sender or receiver. Of course, the verbal signs in our writing or in our speech are more easily separable from us than the natural signs we make by gesturing or with a facial expression, although these too can be separated by recording them on film or videotape. As a matter of fact, the ability of man to create signs that will be portable throughout space and time is one of the characteristics that sets human communication apart from most animal communication. With relatively few exceptions, even the more intelligent animals are limited to communications signs that are inseparable from the situation in which they are used. A dog growls over a particular bone at a particular place, and thus communicates the information that he will defend that particular bone at that particular time; he has no way of communicating that he will defend all bones of a certain kind in certain conditions, or of writing a history of his defense of bones, or any of the acts of abstraction which human language permits us to do. We, too, use natural signs: we pound the table to emphasize a point, or smile at a particular young lady, but we can also encode a message that may be read and interpreted hundreds of miles or hundreds of years away, and we can deal with highly abstract notions that apparently are beyond the capability of the nonhuman animals. To develop this idea, however, requires us to talk about language, which is too

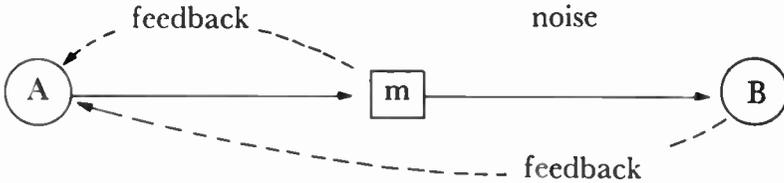
large a subject for this paper. Here we need only illustrate the fact that the message is, at some point in the process, separate from both the sender and the receiver.

At that time the sender can look at it with new eyes, so to speak. He can wish, as all of us have, that he had used another word, or emphasized another word, or said something more nicely or more nastily or more persuasively. The kind of information that comes back to the sender from seeing or hearing his own message is one kind of *feedback*, by means of which he can guide his further communication and try to repair the damage, if any. A still more important kind of feedback comes to him from the receiver. Perhaps the receiver will say, "I don't understand," or "I get it," or "This bores me," or "I don't like what you have just said." More likely he will wince, or look blank, or yawn, or nod his head in agreement. Such feedback tells the communicator how his message is being received. We might diagram feedback links in this manner:



A message may become contaminated. This is the concept usually called *noise*, which was introduced from electronics and has an exact meaning as electronic noise but has been used to cover a multitude of phenomena in human communication. It is usually defined as anything in the communication channel which the sender did not intentionally put there. This may be actual physical noise (a jet plane that comes over just as a young man tries to whisper to his girl), distracting elements (a bad accent or an unsuitable costume), competing elements (someone else calling to the intended receiver, a big headline or a picture elsewhere on the page to attract a man away from the newspaper story he is reading), or any one of many other things. It is a useful idea, though not a very tight one, because it calls attention to the fact that a message (which is usually less than perfect when it is encoded) is likely to suffer further dete-

rioration before it is decoded and interpreted by a receiver, and that in human communication as well as electronic, a high signal-to-noise ratio is to be desired.



We have not yet introduced the framework of social relations in which we said all communication necessarily functions. These enter into the communication process on at least four levels. First, there is the physical communication situation itself. Deutschmann¹³ has usefully classified communication situations in this way:

Private communication	Face-to-face (e.g., conversation)	
	Interposed (e.g., telephone call, letter)	
Publication communication	Face-to-face	Assembled (e.g., meeting, theater)
		Non-assembled (e.g., individual using radio, television, or newspaper)

He points out that different kinds of signs are likely to be used in different situations; for example, orthographic signs in a letter, spoken words and gestures in face-to-face and audio-visual media situations, and so forth.

He might also have said that the particularities of the situation themselves constrain to some extent the kind of communication that goes on there, and the response that is likely to be made to it. For example, a boy who wants to propose marriage is more likely to do so in a private face-to-face situation than a public meeting or on television. When he hears a political

¹³ P. J. Deutschmann, "The Sign-Situation Classification of Human Communication," *Journal of Communication* 7, no. 2 (1957): 63-73.

speech on radio in his apartment, he is unlikely to jump to his feet, clap his hands, and shout, but this is exactly how he might respond to the same speech at a political rally. Being with an audience at such a rally would have an effect on his own response. But consider the situation on a less global level. We have already said something about the social setting of communication. One is unlikely to communicate, looking at a burglar over a gun barrel, in the way one might communicate looking at a pretty girl over a martini. One is unlikely to communicate with one's father in the same way as with a stranger, or with a trusted friend in the same way as with a distrusted competitor. In any of these cases, the very act of communication sets up a functional group. The purpose of the group (e.g., to borrow a cigarette or discuss marriage), the situation (a convertible in the moonlight or a crowded subway car), and the relationship which the participants bring into the situation (friends, enemies, lovers, strangers) necessarily set up certain role patterns of behavior.

In the third place, there are certain relevant groups whose norms and role patterns are likely to have something to do with what goes on in the communication process. We live in groups (such as families and work groups), and many of our most satisfying experiences occur in groups. We cherish and defend the norms and beliefs of the groups we value, and we try to follow the role patterns they give us to play. That is, if we value church membership, we try to live according to the code of the church; if we value our family life, we try to play the part of a good father, or husband, or son, as we understand those roles. It is only natural that when communication enters an area where it touches one of our group memberships, we should recall the norms and roles of the group and check the communication against them. For example, a good church member is unlikely to respond favorably to an attack on religion. A good family man is unlikely to respond favorably to criticism of his children. In some cases a participant is likely to check a communication directly with members of his valued groups before he acts on it. Studies of adoption, for example, have found that physicians are very likely to ask one of their

good friends in the profession what his experience has been with a new drug, and farmers are likely to ask other farmers they admire for advice on adopting a new agricultural practice.¹⁴

In the fourth place, the norms and constraints of the society as a whole inevitably impinge on the communication process. In any society there are things one does and things one simply does not do, things one believes without challenge and ideas one doesn't entertain, because of the society one has grown up in. Some figures and traditions can be challenged with impunity; others, not. And not only the content, but the ways of communicating differ among societies. Many Latin Americans like to talk to you from a distance of about eight inches, and they feel very uncomfortable if they are forced to speak, say, from the other side of a desk. A North American, on the other hand, feels it is unnatural (except at a cocktail party) to talk much closer than thirty inches, and there have been comical scenes when a man from one continent has retreated all the way across a room to keep what he regards as a respectable distance, all the time followed closely by a man from the other continent trying to keep *his* idea of a respectable distance. If you are introduced to a girl in Germany, you can shake her hand; in Spain, you can kiss her hand. In some countries there are restrictions on the freedom of children to play with other children. In some countries you can start a conversation with any stranger on the street; in other countries, an attempt to do so will be scornfully rebuffed.

It may be well now to turn from the situation in which a communicator displays signs which he hopes to share with a receiver, and talk about the signs themselves.

We have already spoken of the separateness of the message at one point in the process. This is the case whether it exists as the variations in air pressure which we hear as sounds, variations in light frequencies and intensities and patterns which we see as print and pictures and movement and color, actions

¹⁴ See, for example, H. Menzel and E. Katz, "Social Relations and Innovation in the Teaching Profession," *Public Opinion Quarterly* 19 (1955): 337-52; E. M. Rogers, *Diffusion of Innovations* (Glencoe, Ill.: The Free Press, 1963).

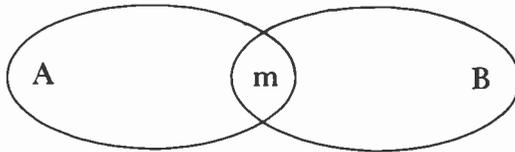
which we perceive as touch, or chemicals in the air which we smell. These physical manifestations have a separate existence into which a receiver, according to his cultural background and resources, will read some meaning or other. Meaning is thus a cognitive and emotional thing; it exists within the participants. It is the response a receiver makes to the signs that embody the message.

Let us emphasize that meaning is more than a dictionary definition; it is both cognitive and emotional, connotative as well as denotative—the response of a whole personality to a set of signs. A person learns these responses by associating signs with referents (the things they refer to). He sees a dog, hears it, touches it, smells it, observes how it behaves. Someone calls it a dog, and after a time the word *dog* evokes from him some—not all—of the responses he made to the experience of meeting an actual dog. As he meets more dogs, he generalizes the word *dog* to cover all these experiences. Thus his response to the sign will not be precisely like his response to any particular dog—especially if the dog is growling at him, or brushing affectionately against his leg—but it serves as a code for his stored memories of all these experiences. This is the way he learns most signs, but he learns also from other signs. For example, many a child who has never seen a wolf still learns to respond to the word *wolf* by being told that it is like a big, fierce, wild dog—or by seeing a picture of a wolf.

Thus the meaning anyone is able to read into signs depends on his experience with them and their referents. The word *airplane* will mean nothing to a native of central New Guinea who has never heard of or seen an airplane. A man who knows only Russian and a man who knows only English would have the greatest difficulty communicating in words, although they might get messages through by gesture, pictures, or numbers. An Eskimo who has never seen any dogs other than huskies will probably make a different response to the sign *dog* than a city matron whose experience with dogs has been mostly with poodles.

The similarity of meaning which Mr. A and Mr. B will per-

ceive in a message depends on finding an area where the experience of the two people is sufficiently similar that they can share the same signs efficiently. If we think of the circle around A and the circle around B in the following diagram as their *frames of reference*, by which we mean their fund of usable experience, then the areas where they can communicate efficiently with each other are represented by the overlap of the two circles:



A message is not as simple as it looks. Much of its potential meaning lies outside the spoken words. Think of the cues that accompany the words even when A says such a casual thing to B as, "Have a cigarette?" There will be information in the tone and quality of the voice, the accent, the emphasis, the speed (is the question drawled or spat out? said in a relaxed way, or tensely?); in the gesture that accompanies the offer; in the facial expression; in the clothes (the advertisers have alerted us all to "sincere" ties); in the stance (slouching? upright? close and confidential, or far away?); in the place or the situation chosen for this message (a candle-lit restaurant, a business office, a party?); in the associated odors (does he smell after liquor?) and touch (an arm around the girl?). These and other cues—including the word signs actually spoken—make up the total message to which the receiver responds. Compared to the number and variety of cues that come with a face-to-face message, certain media messages—a newspaper story, for example—seem rather bare, because receivers concentrate on the printed words. But the size and face of type will contribute some additional meaning; the length of the story, size of the headline, position on the page, and page on which the story is printed will provide cues as to the importance of the item; the picture that may accompany the story, the caption on the pic-

ture, and the author's by-line, if any, will tell us more. Thus even in this case the message contains a considerable number of nonverbal cues which contribute to the meaning.

In addition, a message has dimensions in time or space. It has some structure. It has a balance and some distribution of emphasis and weight. It may have a form that communicates beauty and makes it pleasant to read or listen to or look at. These qualities, too, contribute to the total response a receiver makes to it.

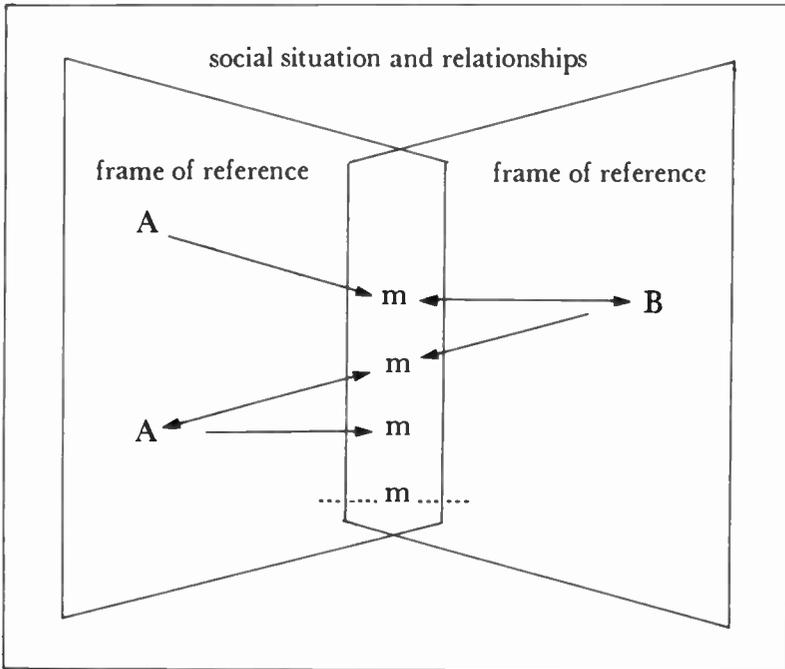
Mr. A codes this message as well as he can, considering his abilities, his resources, and the social constraints upon him. He brings it out of its privacy and turns it loose, hoping that it will meet the needs that led him to encode it. To this message comes Mr. B. He has the same kind of resources as Mr. A—certain skills for encoding and decoding; a set of learned responses to signs; certain beliefs and values, some lightly held, some which he is prepared to defend stubbornly against any change; certain loyalties to persons and groups, a sense of the behavior expected of him as a member of those groups, and a keen sense of the possible social consequences of going against the norms of the groups he values. Mr. B comes to the message asking, "What is it? Is it interesting enough to pay any attention to? What does it mean to me?" If he decides it is interesting and promising enough, he selects some or all of the cues it offers, interprets them according to his frame of reference, and disposes of them according to his needs, his values, and the social imperatives and constraints he feels.

A number of years ago I suggested that a "fraction of selection" was probably operative at the time when a receiver made a selection of messages. This, somewhat modified at the suggestion of some of my colleagues, is perhaps worth repeating here:

$$\text{likelihood of selection} = \frac{(\text{perceived reward strength}) - (\text{perceived punishment strength})}{(\text{perceived expenditure of effort})}$$

The fraction, of course, can be made larger either by increasing the upper term, or decreasing the lower. It helps to explain

why home television made so much dent in movie attendance (less effort needed to enjoy programs at home), why jamming is not entirely sufficient to stop the listening to foreign shortwave broadcasts (some people want very badly to hear them), why public library use falls off so sharply after the teen years, and so forth. The reservation I have about this idea, however, is that it implies a rationality that does not really bulk large in the process of selection. Much selection must be accidental: a person "just happens" to be where he can attend to a given message. Much is impulsive. On the other hand, over the years a person tends to seek the kinds of communication that have rewarded him in the past—his favorite television programs, his favorite columnists, the advisers he trusts. He has, therefore, a built-in expectation of reward from looking in certain places. Beyond that he tends, other things being equal, to select the cues that are close at hand and easy to find in the glut of communication.



This section began with several models of the communication process. We might conclude it with another model which, though overly simplified, I have sometimes found useful in explaining how communication works. It is shown on the preceding page.

Patterns of Function and Process

It would be inappropriate to deal at length with the effects of communication at this point, because that topic will receive major attention later in this volume. However, it may be worth suggesting here that the goals of communication are related to what goes on within the process. The four main types of communication—informational, instructional, persuasive, and entertaining—each require slightly different patterns of information processing, and we may find it useful to set out some of those differences in tabular form.

Let us be clear that these communication functions are not often separated so clearly as the outline on pp. 36–37 might suggest. Advertising is a combination of persuasion and information, and in many cases it tries to attract attention and good will by means of a strong entertainment component. A good teacher tries to combine a little entertainment with his instruction, and he may try to persuade students to adopt a certain set of values—at least to value learning. Any of us may try to give information in an entertaining way, and an increasing number of novels, dramas, and poems have persuasion as a secondary goal.

It is noteworthy also that any of the communicators referred to in the outline can function either on the professional or the amateur level. For example, anyone can transmit information, but a foreign correspondent is a highly trained and specialized collector and transmitter of information. All of us engage in persuasion, but certain people—advocates, advertisers, and politicals, among others—do it professionally. A teacher may be a highly trained and long-experienced graduate of a professional college or school, or a mother helping her child learn to tie a shoe. Any of us may tell a joke, but Bob Hope is a professional

at it. And consequently, each of the functions has been institutionalized in the mass media as well as in interpersonal discourse.

Nevertheless, the outline makes it clear that the intended function of communication has something to do with what happens in the process.

Perhaps the part of the outline most in need of comment is the concept of *contract*. Our role patterns and cultural value systems make certain expectations of persons who enter into communication relationships, and these requirements vary according to the goals of the relationship. If it is to transmit information, then the communicator is expected to be knowledgeable, accurate, and fair in his interpretations. The receiver is expected to pay attention. If either one fails to live up to these expectations, then the relationship results in disappointment or indignation. Similarly, both the teacher and the pupil are expected to behave in certain ways. In return for attention and obedience, the teacher is expected to know his subject and present it well. An actor is expected to give a skilled performance; in return, the audience is expected for the time to suspend disbelief—not to apply reality tests to the drama, but to live for a while in its world of imagination, and use its ambiguities to stimulate their own imaginations. All these are contracts—seldom expressed but nevertheless operative, and familiar to all of us. We act as though we had actually signed a contract to behave in the expected way. In contrast, there is really no contract involved in a persuasive situation. The receiver enters with his guard up; the communicator is restricted only by anticipation of what might happen if his arguments or promises were later proved false. Obviously, therefore, the persuader enters a communication relationship with certain handicaps that other communicators do not have, and it is not surprising that a good advertiser, lawyer, or politician tries to introduce other elements into the situation—entertainment, for example, or a reputation for solid information along with his persuasion.

Let us now add a few notes on what happens in each of these four types of communication situations.

	INFORMATIONAL	INSTRUCTIONAL	PERSUASIVE	ENTERTAINING
COMMUNICATOR	Any knowledgeable person	Teacher	Any “support-seeker” or change agent	Professional or amateur performer
GOAL OF RELATIONSHIP				
1. Communicator	Transmit information	Transmit information; stimulate further learning activity	Bring about “yielding” or other control of attitude or behavior	Bring about enjoyment and sometimes deeper understanding
2. Receiver	Test reality—usually in short-term context	Learn what he is required to or wants to learn—usually for long-term use	Hear the argument or “sales pitch”	Pleasant or moving emotional arousal—sometimes a quest for new insights
CULTURAL CONTRACT				
1. Communicator	Expected to be good reporter	Expected to be skilled and well-informed teacher	None	Expected to be artist or skilled performer
2. Receiver	Expected to be attentive	Expected to be attentive and studious, and follow directions	None	Expected to “willingly suspend disbelief,” accept ambiguity

SETTING

1. Interpersonal	Anywhere	Schools, or other instructional group	Anywhere	Theater, concert hall, or other appropriate social setting
2. Media	News media	Textbooks, ETV, etc.	Opinion or advertisements in media	Entertainment media

EFFECTS

1. Reaction	Variously interest or disinterest, gratitude, doubt	Sometimes interest and related learning activity	Concern or rejection	“Arousal”
2. Changes	Storage of new and relevant information, to be absorbed in cognitive bases of behavior	Storage of the information perceived as relevant — emphasis on storage for long-term use in problem-solving	Cognitive or behavioral processes to alleviate concern	Few; sometimes new repertoire for social interaction, or new understandings of environment

* This table owes something to Leonard Doob's brilliant analysis of *Communication in Africa* (New Haven: Yale University Press, 1961), and still more to a table made for me by Professor Thomas Cook, of Northwestern University, who has already been mentioned.

The process of informing

Mrs. A. looked suspiciously at her husband, who had buried his nose in a detective story while she was telling him the neighborhood news. She concluded her story abruptly: "And the horse ate up all our children."

"That's fine, dear," he said, after a moment.

"Henry, did you hear a word I said?" she demanded indignantly.

"No, dear," he said, turning the page.

In this sad little story, the process of informing failed to clear the first hurdle. It did not get attention.

We all go through life surrounded by a glut of messages. These are far more than our senses can attend to, far more than our nervous systems could handle. For example, when I drive to work in the morning I pass through a city but perceive little of it. I am busy selecting the cues that let me drive safely and directly to my office. Only when I stop at a traffic light and have a chance to look around for a minute do I appreciate how much I am missing because of my selective attention and perception.

The process of informational communication requires four steps—four hurdles to be cleared: (1) to attract attention to it, (2) to have it accepted, (3) to have it interpreted and—so the communicator hopes—(4) stored away for later use.

How does one select the cues he attends to? We have discussed this in terms of the "fraction of selection" and have pointed out that much selective exposure is accidental or impulsive, rather than rational, but that nevertheless habits develop out of long experience to make it more likely that a given individual will select a given kind of communication than another kind. It should be noted that the research on selective exposure is by no means clear, and that in many cases the experience of practitioners is as useful as the findings of scholars.¹⁵

News editors, advertisers, and other professional communica-

¹⁵ Schramm, "How Communication Works," in *The Process and Effects of Mass Communication*.

tors try to make the message appear more rewarding by appealing to the needs and interests of their intended audience—some of them, like the beauties who advertise soft drinks, quite remote from the rewards their users are likely to get from accepting the product. They try to make it easier to get by making their messages stand out with large headlines or color or pictures, and by saturating the channels.

They try also to encode it and present it so as to eliminate noise and interference as far as possible. One way to do this is to build in redundancy where necessary. In school composition, we are generally taught to avoid redundancy; in practical communication, redundancy is cultivated to combat noise and interference. Repetitions and examples are introduced where it may be hard to get a point. In sending international news cables, important words are often repeated so that there will be as little chance as possible of garbling them in transmission: "WILL NOT—REPEAT NOT—ACCEPT TERMS," the cable reads, and no editor ever upbraids a correspondent for that kind of redundancy.¹⁶

Once the message has been encoded as well as possible and offered where it is likely to attract attention, then the sender can do little more except be alert to the feedback from the receiver. A skilled speaker, for example, can "read" his audience and adjust his communication to them. It is no longer possible to do anything with the message that has gone, but he can still add to it or correct it. And there is always next time.

Then it is up to the receiver. If he decides to give attention to the message, then he must decide whether to accept it, and

¹⁶ As a matter of fact, redundancy is built into all languages. It has been calculated that if a reader of English is given the first, the first two, the first three, or the first four letters of a large number of assorted words in an English passage, he is likely on the average to be able to predict the next letter in about 50 percent of the cases. Therefore, if he misses a letter or even a word, or if the printer makes a typographical error, the reader has a good chance of getting the meaning anyway. Incidentally, to illustrate the importance of a redundancy figure such as we have just given, it is estimated that if English were as much as 80 percent redundant it would no longer be fun to work crossword puzzles, because the answers would come too easily. On the other hand, if the language were only 30 percent redundant, then it would be easy to make three-dimensional crossword puzzles.

he must make his own interpretation. Acceptance will depend largely on the face validity of the message itself, and on his judgment of the sender's credibility or prestige. A well-known experiment in attitude change once used a series of messages about the president of the United States, varying from very favorable to very unfavorable. One of them said that the president was in favor of communism. The audience laughed and refused to accept that message because of its lack of face validity.¹⁷ On the other hand, many persons would tend to accept a rather shocking news item in a distinguished paper like the *New York Times*, because of the newspaper's reputation for accuracy.

If he accepts the message, then he will give it such interpretation as his stored-up experience and his built-in values lead him to give it. As we have said, he can only interpret in terms of the responses he has learned. But one tends to interpret new experiences, if possible, in ways that fit with old experiences and accepted values. This sometimes leads to distortion, and often to selecting the parts of a message that fit comfortably, discarding the rest.

The use a receiver makes of any message depends on what he needs from it. I remember a sad example of how well-intended communication went awry when a certain educational administrator was subjected to very serious charges by a local newspaper. A distinguished academic committee was appointed to investigate the charges. They reported that the charge was without foundation; there had merely been, they said, a "failure of communication" in the administrator's department. They saw their report as a vindication of the administrator (after all, what department has not sometimes had "communication failures"?). But the newspaper paid very little attention to the acquittal on the serious charge, and it trumpeted for weeks the fact that the committee had found a "failure of communication" involving the administrator. Ultimately, the administrator resigned. The chagrined committee realized that what had happened was that they (senders) and the newspaper (receiver) had come to that communication with entirely differ-

¹⁷ Osgood, Suci, and Tannenbaum, *The Measurement of Meaning*.

ent purposes. They had thought to explain the trouble that had occurred, and indicate that it was not too serious. The newspaper, however, was out to get the administrator and simply seized upon the part of the message that would further its purpose.

The process of informing people, then, is not as simple as it might seem. In fact, it is beset by so many problems and pitfalls that the constant flow of relatively accurate information in human society may seem almost miraculous. That information is shared in a usable fashion is a tribute both to the communication skills we learn and to the flexibility and adaptiveness of the human organism.

The process of instruction

In Colombia, where the use of television for in-service training of teachers has been studied by a Stanford research team, it was found that teachers learned a great deal from a televised course on the new mathematics. But if they viewed the course in groups, and discussed each lesson, they learned considerably more than if they viewed alone; and they learned still more if their groups had supervisors who directed the discussion.¹⁸

The chief difference between the process of communication used for teaching and for information is that it is necessary to build some learning activities around the receiving end of the chain. This is what the Colombia educators were doing when they arranged for group discussion of each television lesson, and the result they obtained has been proved out in many other places.

Learning is an active thing. It comes from practicing responses. Lectures or textbooks alone are not enough. All teachers become aware that progress in their classrooms comes about not so much from what they teach as from what their students go about learning: the skills they practice, the problems they solve, the answers they seek.

For years teachers have built practice and discussion around textbooks. The coming of instructional television provided a

¹⁸ This research was done by N. Maccoby and G. Comstock. A report is now in press.

stricter test of this proposition, because television could provide everything the classroom teacher could except personal interaction with the pupils. In fact, it could do some things better than most teachers (furnish excellent demonstrations and teaching aids, for example), and it could share the best teaching. And indeed it was found that pupils learned a great deal from television courses. But they learned a great deal *more* when a program of practice, discussion, and individual activity was built around the television in the local classroom.

Therefore, a characteristic of instructional communication is that it must provide for individual learning activities. The same hurdles must be leaped as in any other kind of communication: attention, acceptance, interpretation, storing. But the messages must be encoded in such a way, also, as to encourage the pupil to rehearse the responses he is expected to learn, and if possible active study and practice must be organized. Almost nowhere in the world is one of the mass media being asked to carry the whole burden of instruction alone. In the "outback" country of Australia, where families often live several hundred miles from the nearest town or school, both elementary and secondary education are offered by radio, but the radio lectures are combined with correspondence study which requires the pupils to submit lessons regularly and maintain contact with a teacher by mail, and wherever possible the pupils are brought together in groups of five or six every day to study together under a supervisor. In Italy, where thousands have been taught by television to read and do simple arithmetic, the process does not work very well unless the pupils are brought together to practice their new skills under supervision. In India, rural adult education has been found to result in more learning and more action if rural programs are piped into a discussion forum.¹⁹

Instructional communication presupposes a kind of contract between teacher and pupil, just as does informational communication. On his part the teacher contracts to give the pupil a

¹⁹ See W. Schramm, P. H. Coombs, F. Kahnert, and J. Lyle, *The New Media: Memo to Educational Planners* (Paris: International Institute for Educational Planning, 1967).

systematic view of useful knowledge, and to give him opportunities to practice what he must learn. The pupil contracts for a certain amount of trust in his teacher's guidance, and a willingness to engage in a certain amount of learning activity. Supposedly, he comes *wanting* to learn. One of the teacher's jobs is to keep up this motivation, and if necessary increase it. If the pupil is not motivated to learn, then, in effect, he does not sign the contract, and the instructional communication is likely to be wasted.

Like the informing process, instructional communication, then, must achieve attention, interest, acceptance, an adequate interpretation, and learning, and it is built upon a special contract between sender and receiver. But it has a long-range rather than a short-range learning goal, and it is expected to incorporate or stimulate certain additional activities on the part of the receiver, in which respect it bears certain resemblances to persuasive communication, as we shall now see.

The process of persuasion

About twenty years ago a series of delightful cartoons was prepared to make fun of racial prejudice. It was thought that this would provide a way to penetrate the defenses of prejudiced people, and perhaps get them to laugh themselves out of some of their rigidity on the subject of race relations. But the most prejudiced people completely misinterpreted the cartoons, and considered them to be really justifications of their own positions. For example, after looking at one cartoon that showed a woman in a hospital refusing to accept a transfusion unless it was "blue blood," a prejudiced person said, "That's a very good idea. I must warn my doctor to be careful about that if I ever need a transfusion."²⁰

The essential difference between instructional or informational, and persuasive, communication is that the former two stress learning; persuasion stresses yielding. Each type of communication must get the message over the several hurdles mentioned earlier. But for persuasion that is not enough. It is nec-

²⁰ This is the "Mr. Biggott" study. See Cooper and Jahoda, "The Evasion of Propaganda."

essary also to set in motion some psychological dynamics by which the receiver may bring himself to yield to the point of view advocated by the persuader.

Of course, it is not so hard to implant new attitudes or encourage new behavior in a new area. For example, if our first contingent of astronauts had come back from the moon with an account of hostile and dangerous little green men, earthlings would have been easily persuaded that they should view with alarm this new threat. After all, we now have very little in our mental files on the subject of moon men. But if we already had long-time knowledge and strongly held attitudes toward moon men, then it would not be such a simple matter to change those. When a strong area is attacked directly, the message is likely to be rejected or distorted as in the case just described.

Think of the situation in which persuasion takes place. We have noted that there is no contract (as in entertainment or instruction) between sender and receiver (although skilled persuaders try to make use of other contractual norms—for example, the door-to-door salesman uses social norms of politeness to hold his audience at least for a little while). The sender is on his own. He can choose the information and package it to fit his goals. He can attract attention by entertainment (the programs accompanying the commercials), by saturating the perceptual field (big type, loud commercials, parades, rallies), by big names and big events. He can advance arguments, make threats, offer rewards. He can even reward us on occasion for role-playing the position he wants us to adopt. *Caveat emptor!*

As for the receiver, he comes with his defenses up (to the extent, at least, that he perceives the persuader as manipulative). He is prepared to be skeptical. He has faced persuasion before. He asks, "What is there for *me* in this message?" He comes with a set of needs he wants to satisfy, and with a set of beliefs and attitudes, some relatively flexible but many of which he is prepared to defend stubbornly. He comes with a set of personal relationships and loyalties, and he feels deeply dependent on many of them. He comes with a set of perceptions of opportunity and threat in the environment, which he is not prepared

to change without seeing good evidence. On balance, the persuasion situation is a buyer's, not a seller's, market.

Probably the closest we have come to the kind of change that might be brought about by discovery of dangerous little moon men is the notorious panic caused by Orson Welles's broadcast, in 1938, of a dramatization of "The War of the Worlds."²¹ The more susceptible people believed the broadcast was real, and that the invaders were actually sweeping everything before them. Suddenly all their environmental support seemed to be crumbling, and with it all their confidence in law and order, and national power. Their need for self-preservation took control, and without bothering to check up on the broadcast they took to the hills. Fortunately, this kind of persuasion has not often been used, but the Welles incident illustrated dramatically (1) the importance of not being perceived as manipulative; (2) the effect of vague threat for which many receivers could think of no defense; and (3) the use of a contractual culture norm—trust in radio as a disseminator of news.

The process of persuasion, so far as it is primarily a *communication process* (as distinguished, let us say, from the use of force, or a training process like operant conditioning) consists of introducing some information which leads the receiver to reappraise his perception of his environment, and through that to reappraise his needs and ways to meet them, or his social relationships, or his beliefs and attitudes.

Suppose that the goal is a reappraisal of needs. One tactic is to encourage a new social need (who felt a need for a hula hoop before the fad was promoted?). Another is to make an old need salient; for example, skillful enough advertising can make us aware that we are hungry, and then it is relatively easy to implant the idea that the client's product might be just what we are hungry for. Still another is to present a new way to satisfy an old need (Brand X tastes better).

If the picture of reward and threat in the environment can be changed sufficiently, then we can expect that this change

²¹ See H. Cantril, *The Invasion from Mars* (Princeton: Princeton University Press, 1940), and article in this volume.

will be reflected in a receiver's estimate of his urgent needs at the time and consequently in his attitudes and behavior. This is one kind of change process on which communication might have some effect.

A similar process can be triggered by changing a receiver's percept of his social relationships. Every salesman, of course, tries to establish himself as a friend and well-wisher of the prospective buyer, so that his persuasion will be trusted. Many of the most successful evangelists put a new convert at once into a group of believers so that his decision will be socially reinforced. Many advertisements hold out the implied hope of being able to join an admired group—for example, "men of distinction," or the sponsors of a particular cause, or "the Pepsi-Cola generation."

One of the patterns which some nations have been reported to use in attempts at "brainwashing" involves simultaneously removing old social support and providing new support. A military captive is removed from his officers (the authority structure) and ultimately from his fellow P.O.W.'s (friendship group). He is allowed to receive no mail from home, and is told that other captives have informed on him. These are all steps to take away the social support for the values and behavior patterns it is desired to change. Then he is put into a small group where people are studying communist doctrine and writing "confessions" of their former "errors." He is rewarded and socially supported for every step he takes in the desired direction, and encouraged to build up new friendships among converts. Obviously, such a radical change as persuading a soldier to give up his loyalty to his country is not accomplished very often, but the process is nevertheless clear: (1) undermine confidence in existing social relationships, (2) offer new ones that (3) reward a person for desired opinions and behavior.

Another tactic is to build up cross-pressures on a target. If a person can be convinced that two groups he values, or two advisers he trusts, disagree completely on the point at issue, then he will be vulnerable to a suggestion that seems to offer a way out of the inconsistency.

One of the most powerful processes that seems to be accessi-

ble to persuasive communication is what we might call the strain toward consistency. A great deal of research has been done in the last ten years on consistency theory, which is based on the premise that people are motivated to establish consistency and will try to make their attitudes, beliefs, and behaviors consistent with each other. Heider was one of the first social psychologists to make prominent use of this concept, and an early example of a consistency theory was Newcomb's A-B-X model. Since that time, Festinger, Osgood and Tannenbaum, Rosenberg, McGuire, and others have made important contributions to consistency theory, which will be discussed and, in some cases illustrated, later in this volume.²²

When communication is used for persuasive purposes, then, there are strong defenses against change in any attitudes and beliefs that really matter to the holder—defenses that would ordinarily reject a suggestion for change or distort it as the cartoons we described at the beginning of this section were distorted. It is necessary to breach those defenses in some way—to implant information that will start a process of reappraisal and reorganization.

The process of entertaining

"What do you think T. S. Eliot really meant by 'The Hollow Men'?" asked Miss A, who is a high school senior.

"I don't know," her brother said. "Why doesn't he write so there's no question what he means?"

"It wouldn't be any fun if he did," said Miss A.

The essential difference between the communication process used for entertaining and other versions of the process is that they operate under different ground rules, which are illustrated by the little exchange just quoted.

Entertaining requires the same steps as the others. The message must be coded so as to be interpretable within the experi-

²² F. Heider, *The Psychology of Interpersonal Relations* (New York: Wiley, 1958); T. Newcomb, "An Approach to the Study of Communicative Acts," in Hare, Borgatta, and Bales, *Small Groups* (New York: Knopf, 1955). See also Festinger, *A Theory of Cognitive Dissonance*; McGuire, "Attitudes and Opinions"; Hovland and Rosenberg, *Attitude Organization and Change*.

ence of the audience, it must appeal to audience needs and interests, and it must so far as possible be designed to avoid the hazards of noise and interference. It must gain attention, it must be accepted, and it must be interpreted. Feedback is at least as important in an entertainment situation as an information one; in the case of live entertainment it is a crucial element—if the artist cannot fit his act to his audience, he is a failure—and in the case of media entertainment it is so important that broadcasters spend millions of dollars each year on learning about their audiences.

The chief difference lies in the unwritten contract between sender and receiver. Entertainment requires of the receivers a certain "willing suspension of disbelief." Instead of requiring full and accurate reporting and remaining skeptical of anything that checks poorly with their picture of reality, the entertainment audience must be willing to let down their defenses, go along with a story or a spoof or a good joke, often agonize and rejoice with a character who never lived or could live. Instead of expecting simple, clear, unambiguous writing, they expect a certain kind of artistic ambiguity and a host of latent meanings.²³ Poetry, for example, often uses figures of speech and incidents that can be interpreted variously according to what a reader finds in them, as Miss A recognized in the incident with which we began this section.

The entertainer is expected to have more concern with form than is the informational communicator. The way he writes or speaks or moves is itself expected to give pleasure. He is expected to be imaginative rather than utilitarian, to write richly rather than clearly, to tell a good story, to do an expert job of turning a phrase or building a scene. In other words, whereas informational communication asks for the skill of the reporter, entertainment asks for the skill of the artist. Even on the level of entertainment represented by the luncheon club joke, still a good storyteller must be skillful at imitating dialects and knowing where to put the punch line. And he must be alert to audience feedback so that he knows how long to build up the story.

The receiver, on his part, is expected to be willing to iden-

²³ See C. Empson, *Seven Types of Ambiguity* (New York: Meridian, 1955).

tify with one or more of the characters, to put himself in their places, to feel with them. In poetry and modern painting, he is expected to enjoy ambiguity, rather than to let himself be frustrated by it. The question, "What did the author mean?" is shunned by most modern writers and many modern teachers, who prefer the question, "What does it mean to *you*?" In fact, it is in works of art that we can appreciate the true separable-ness of messages. For nearly three thousand years people have enjoyed the *Iliad* and the *Odyssey* without ever really knowing much about who Homer was. For four hundred years viewers of *La Gioconda* (the Mona Lisa) have enjoyed the portrait and read their own interpretation into it, without knowing or much caring what da Vinci thought it meant.

The intended effect of entertainment communication is also different from that of the other types. Each of these, and notably instruction and persuasion, is basically concerned with a long-term effect—storing information, continuing learning activity and problem solving, attitude or behavioral change. Entertainment communication, on the other hand, is usually aimed at an effect on the audience while it is exposed to the entertainment. This does not mean that there are no long-term effects of entertainment communication. We know, for example, that children often imitate for a long time afterward what they have seen on television. A fine drama may contribute insights or change attitudes that will remain for a long time with members of the audience. Aristotle developed a theory that the effect of fine poetry or drama was to purge audiences of unworthy sentiments, and all of us have seen that entertainment often serves to reduce tensions. But the basic effect occurs during the communication, and it is an emotional and aesthetic arousal, quite different from the effects of any of the other kinds of communication we have discussed.

A Note on Mass Communication

A question remains. Is the process of *mass* communication any different from the process of *interpersonal* communication?

Mass communication is more complicated. A large organiza-

tion is inserted into the communication chain, with its own internal communication, and its own need to inform itself, to arrive at and carry out policy decisions, and to socialize its new employees to roles and norms. Westley and MacLean have spelled out some of these complications.²⁴

This organization operates around a machine, and therefore can duplicate messages and send them in great numbers through space and time, and to a very large audience. Instead of having to deal with a single receiver, or a small face-to-face group, mass communication has an audience many of whom it never sees or hears from. Feedback is weak, and the audience is usually heterogeneous in abilities and interests.

Choosing the content is therefore more difficult than in interpersonal communication, where the relationship is direct and feedback is usually immediate. The mass medium has to decide whether to program for the largest possible audience or for segments of it, and how to divide time and energies if it decides to program for different segments.

Furthermore, social demands and social controls on the mass media are louder and stronger than on the individual. Any society usually has rather definite ideas of what it wants its mass media to be and do. It may exercise control on them through law, executive action, economic support, or otherwise. This further complicates the job of the media.

But on the whole the similarities between the processes of mass and interpersonal communication are far greater than the differences. Mass communication faces the same defenses. It must jump the same hurdles: attention, acceptance, interpretation, and disposition. It requires the same kinds of contract between sender and receiver for entertainment and instruction. It must depend on activating the same kinds of psychological dynamics if it is to persuade.

As we have said, the fashion was for a number of years to worry about the great and awful power of mass communication, because of the enormous number of hours people gave to

²⁴ B. Westley and M. MacLean, "A Conceptual Model for Communications Research."

media entertainment and the size of media audiences for political information. But the more scholars looked into the effect of the media, the more they found that the same resistances to change applied there as in person-to-person communication—in fact, more strongly. People come to the media, as to other messages, seeking what they want, not what the media intend them to have. Because there are so many media and media units, they have a considerable choice. They still have their defenses up; they still defend their strongly held positions. Because of their distance from the media, and the relatively isolated way of reading, viewing, or listening, they tend to put even greater reliance on their social groups and their advisers.

Katz, Lazarsfeld, and others discovered a phenomenon they called the "two-step flow," by which they meant that much of the influence and information from the mass media reaches the public through opinion leaders or influentials, who are great users of the media and filter them for retransmission by interpersonal channels.²⁵ Later and longer looks at the "two-step flow" lead us to think that it might be better called an "*n*-step flow," for the influentials have their own influentials to whom they go for advice and information. However that may be, the point is that interpersonal channels of information are functioning side by side with the mass media channels, and these interpersonal channels are exerting much of the influence in society.

This is not to say that close and influential relationships may not be built up between someone in the mass media and people in the audience. Father Coughlin had the ability to build such a relationship, and many dictators of our time have felt that control of the media was essential to their power and continuing influence. The birthday and "get well" cards that some people in the audience send to entertainers they do not know, and even to cartoon or fictional characters who have never lived, are other evidences of personal attachment. But there is

²⁵ E. Katz, "The Two-Step Flow of Communication," *Public Opinion Quarterly* 21 (1957): 61-78.

good reason to think that the media in a democratic society, as Lazarsfeld and Merton argue, are more likely to contribute to the status quo than to great change;²⁶ and the less control on the media, the less uniformity that is enforced upon them, the more likely that they will not be able to impose any single pattern of belief or conduct on their audiences.

It is the long-term effects—which are hardest to study—that most concern us. Is the picture of environment that is being presented by the mass media accurate and sufficiently complete? In a sense, what the media do *not* carry might concern us more than what they do carry. And what effect on tastes and behavior can be predicted from the long hours now devoted to television? There is evidence that television and films serve as a model for much behavior.²⁷ McLuhan has argued that the act of carrying on so much of human communication through lines of printed type signs reading horizontally may have a deleterious effect on personality and culture, but this is not proven, and in any case the whole trend in the last fifteen years has been to devote more and more communication time to television and films which McLuhan, contrary to many other critics, regards as a salutary change.²⁸

Among the long-term effects, the most potent may well turn out to be the less dramatic ones—not the gross anti-social effects, but the gradual building up of pictures of the world from what the mass media choose to report of it; the gradual homogenization of images and behaviors over large populations, as a result of the universality of the mass media; the granting of status to persons who have access to the media. I once described this effect as resembling the gradual building up of a stalagmite in a cave, from the constant drip-drip of calcareous water upon it, each drop leaving a residue so small as to be invisible until the dripping had continued for years. And not until

²⁶ P. F. Lazarsfeld and R. K. Merton, "Mass Communication, Popular Taste, and Organized Social Action," in Schramm, ed., *Mass Communication*, pp. 492-512, and in this volume.

²⁷ For example, see A. Bandura, "Imitation of Film-Mediated Aggressive Models," *Journal of Abnormal and Social Psychology* 66 (1963): 3-11.

²⁸ M. McLuhan, *Understanding Media* (New York: McGraw-Hill, 1965).

hundreds of years later could visitors see that the stalagmite had grown and altered its shape. This kind of effect, rather than quick and dramatic change, may be the chief impact of the mass media on human society.

A. MEDIA AND MESSAGES OF MASS COMMUNICATION



INTRODUCTION

Media as Communication Institutions

AS LONG AS THERE HAS BEEN human communication, there have been persons, organizations, and places that have served as centers for the input and output of information. The traveler, the scholar, the teacher, the merchant, and the gossip have been such persons. The bazaar, the social club, the government, in our time even the barber shop and beauty parlor, have been such organizations. The rocks along the Oregon Trail on which names and messages were scratched, the stone on which the Roman Senate inscribed its decisions, and the college bulletin board have been such places. All these have shared the ability to attract information and distribute it widely.

When mass media came into being—that is, when we learned how to insert a machine into the communication process, and print or film or broadcast the signs of communication—the principal differences between the new media and the more traditional media were in scale and in operation. Between the rock on the Oregon Trail and sixteenth-century printing there is a quantum jump in the power to multiply and distribute messages. Between the traveling minstrel and a network news operation there is a quantum jump in the ability to scan environment and distribute information about it. Between the village gossip and the news or documentary film there is a quantum jump in the ability to share “what really happened.” The enormity of these differences, the startling power of the mass media to leap space, telescope time, and make information portable and preservable, gives them a kind of social impact that the more traditional media never had.

A second difference is that the mass media require an organization to operate them. Behind a newspaper or a news broadcast stand thousands of professionals and technicians. The mak-

ing of a book or magazine or film requires a large capital investment, sophisticated equipment, and many highly trained persons working skillfully together. Consequently, the mass media have taken on many of the characteristics and social constraints of other large social institutions and organizations. As DeFleur makes clear in the paper immediately following, they form a social system which is tightly integrated with the whole of the American economic institution, and closely related also to the political system.

Looked at from the media side, therefore, communication through mass media channels seems considerably different from communication through the more traditional channels. Looked at from the university classroom, the two processes seem different, too, because students of communication note at once that there is a fundamental difference in feedback from receiver to sender of messages. In personal communication, feedback is usually quick and extensive; in mass communication, usually slow and weak. But when the process is looked at by the members of society at whom mass communication is chiefly aimed, these differences seem less sharp and less significant.

Communication flows constantly through society, touching every member. Some of it comes through personal channels, some through mass media. To a user, it makes really very little difference through what channel it arrives; he is concerned, rather, with what use he can make of it and how much he can rely upon it. Any message from the mass media enters into a flow of communication that is already in progress. In most cases, therefore, it does not retain its identity. It is picked up and relayed through personal channels. It is reinterpreted, retold, redirected. If it represents any significant suggestion for change, it is sure to be discussed and debated. If the discussion is of broad enough interest, it is likely to be continued in the media—an interview, quotation, statement, letter, public speech, panel discussion. If anyone in the audience decides to make a significant change as a result of the communication that has come to him, he is likely to return to the media for reassurance and confirmation.

Thus mass and personal communication interact and supple-

ment each other. The rural sociologists studying diffusion of innovation discovered that different kinds of communication are more likely to be used at different points in the adoption process: for example, the mass media to bring about awareness, personal channels during the period of evaluation and decision, and both mass and personal communication when confirmation is desired.

We have not included in this volume an article on the two-step flow of communication, although that is perhaps the best-known concept of the relationship of mass to personal channels. We made this decision because the theory is presently in flux, and a succeeding theory has not yet clearly emerged. A reader who wants a summary of late thinking on this topic can look at Everett M. Rogers's volume, *Communication of Innovations: A Cross-Cultural Approach* (Glencoe, Ill.: The Free Press, 1969).

The concept of the two-step flow arose out of a classic study of the 1940 presidential election by Lazarsfeld and others, which was published in 1944 as *The People's Choice*. The research team found, somewhat to their surprise, that almost no votes seemed to have been directly influenced by the mass media. Rather, the evidence appeared to indicate that "ideas often flow from radio and print to opinion leaders and from these to the less active sections of the population."

This two-step flow model was highly useful, both in sparking a number of field research studies and in casting doubt upon the long-held "hypodermic needle" or "bullet" theory of mass media effect. The two-step model turned attention to the importance of personal influence, as distinct from media influence, and to the interactive process among communication channels.

Therefore, the concept of a two-step flow has proved fruitful; but the more research that has been done, the clearer it has become that the model as stated is too simple to represent reality. Later campaign studies showed that many voters do not seek any personal advice at all. Many nonleaders are not followers of opinion leaders. The process of personal influence itself is much more diffused and complicated than the model suggests.

There is no very general dichotomy between leaders and followers, and leaders have others who influence them, who in turn have others, and so forth. Opinion leadership, as Rogers has pointed out, is a continuous variable. Rogers, Katz (who has written perhaps most definitely about the two-step flow), and others including the present authors have concluded that the two-step flow model must be reconceptualized in terms of an "*n*-step" or "multi-step" flow, in which there are many relay points from channel to channel and a much more complex pattern of influence than was previously assumed.

In other words, the communication institutions we call mass media sometimes reach a member of the audience directly with their information and ideas, sometimes second-hand, or third- or fourth-hand, and sometimes in a form considerably different from the original. In some situations the media may have a direct effect, but more often the effect of mass communication, if any, must derive from whatever the media contribute to the ongoing flow of personal communication, and their interaction with the patterns of influence, norms, and learned behavior that exist in society.

But even though the process of effect may be complicated, and effects often hard to prove, still it is hard to doubt the potency of the media as social institutions. In the following pages Lasswell analyzes their functions from a political base, but in a way that makes it easy to generalize far beyond political process to the functioning of the social system as a whole. The last four papers, in different ways, deal with the significance of the fact that so much of society's information now necessarily comes through the mass media. McLuhan postulates an effect from the nature of the medium, regardless of the content; he argues that it makes a difference in human life whether environment is seen through personal communication, or print, or television. Boorstin, Rivers, and the Langs, however, are concerned more with content, and with the performance of media personnel, than with the physical nature of the medium per se. They recognize the social constraints upon media performance, but they are not happy with the clarity and balance of the picture

of environment being provided through media channels. The enormous power and responsibility delegated to a social institution when it is assigned to act as the eyes and ears of society becomes clearly evident upon a reading of these papers.

MELVIN L. DEFLEUR

*Mass Media as
Social Systems*

When we say that the mass media constitute a social institution or a social system, precisely what kind of system are we talking about? How does it work? And why has the system been able to resist, as well as it has, continuing attacks and criticism? These are questions that DeFleur takes up in this chapter. He advances the provocative idea that the "low-taste" content of the media is the key element in their social system, because it caters to the taste of persons who make up the largest segment of the market and thus maintains the financial equilibrium and stability of the media system. This is one reason why mass media have been so secure in the face of attack. Dr. DeFleur is chairman of the department of sociology at Washington State University. The following paper is a chapter from his book, *Theories of Mass Communication*, published and copyrighted 1970 by David McKay Company, New York. It is printed here by permission of the author and the copyright holder.

WHILE THE mass communication research and theory of the recent past and of the contemporary period has almost uniformly stressed "effects" as the major object of explanation, it has been repeatedly suggested in the present volume that there are other, and possibly equally important, aspects of the media that deserve theoretical and empirical attention. One of the most challenging of such issues concerning these media is their ability to *survive* and for long periods of time provide their audiences with content which the more artistically sensitive elite has regularly condemned as being in bad taste or even downright dangerous. There has been a continuous dialogue carried on between the more educated and conservative elements of society and those who are either in control of the media or who serve as their spokesmen. This issue of "elite culture" vs. "mass culture" has on some occasions stirred debate in the highest political, educational, religious, and legal circles of the nation. A long series of court battles has been fought over books, magazines, and other forms of print which their publishers claim are

“artistic” but which public prosecutors maintain are “pornographic.” Attempts to censor motion pictures at the community and state levels have also provided occasions for extensive legal actions. The freedom of speech principle vs. statutory prohibitions of lewd, lascivious, or salacious portrayals provide ample grounds for lively discussion. Even Congress periodically enters this controversy when it investigates television content, comic books, or other media to determine if they are causally related to juvenile delinquency or cause some other form of deviant conduct.

In these encounters, the media seldom or never emerge unscathed. At the very least, they nearly always evoke strong criticism. Whether the situation is a formal hearing before a congressional committee, or simply the reflections of some well-known literary figure giving his views on the worth of media content, the ordinary fare of the mass media of communication has been universally and roundly condemned by society’s political, educational, and moral leaders.

Such hostility has deep historical foundations. Plato may have provided the opening round in the controversy long before the mass media themselves were ever invented. In his commentary on the training of the children who were to become the leaders of his ideal Republic, he saw the mass culture of his day as posing a threat to the minds of the young:

Then shall we simply allow our children to listen to any stories that anyone happens to make up, and so receive into their minds ideas often the very opposite of those we shall think they ought to have when they are grown up?

No, certainly not [replies Glaucon].

It seems, then, our first business will be to supervise the making of fables and legends, rejecting all which are unsatisfactory; and we shall induce nurses and mothers to tell their children only those which we have approved. . . . Most of the stories now in use must be discarded.¹

¹ *The Republic of Plato*, trans. Francis M. Cornford (London: Oxford University Press, 1954), pp. 68–69.

This theme—popular entertainment is harmful to the minds of the young—has been a consistent one from the very beginnings of mass communication. It has been claimed from time to time that such charges can be validated by scientific evidence, but repeatedly this evidence has turned out to be less than convincing.² Social scientists insist that any important conclusions about the effects of the media be supported by solid evidence. Because of such insistence upon data rather than emotion, they sometimes find themselves in the awkward position of seeming to defend the media when actually they are simply refusing to accept the inadequately supported claims of critics. Most social scientists today are quite wary of any simple answers or unverified conclusions concerning causal relations between media content and undesirable conduct.

However, the insistence that conclusions be based upon adequate evidence has never deterred the literary critic from charging the media with a deep responsibility for society's problems. Most nineteenth-century American writers at some point in their careers took time to criticize and condemn the newspaper for superficiality and distortion. The following excerpts from the pens of well-known and influential literary figures are samples of the climate of opinion prevailing among the literati during the time when the mass newspaper was diffusing through the American society:

Henry David Thoreau (written just prior to 1850):

The penny-post is, commonly, an institution through which you seriously offer a man that penny for his thoughts which is so safely offered in jest. And I am sure that I have never read any memorable news in a newspaper. If we read of one man robbed, or murdered, or killed by accident, or one house burned, or one vessel wrecked, or one steamboat blown up, or one cow run over on the Western Railroad, or one mad dog killed, or one lot of grasshoppers in the winter—we never need

² Examples of such claims are Herbert Blumer and Philip Hauser, *Movies, Delinquency and Crime* (New York: Macmillan, 1933), and more recently Frederick C. Wertham, *Seduction of the Innocent* (New York: Rinehart and Company, 1954). (The latter is a bitter denunciation of comic books.)

read of another. If you are acquainted with the principle, what do you care for a myriad instances and applications? To a philosopher all news, as it is called, is gossip, and they who read it and edit it are old women over their tea.³

Thomas Carlyle (written about 1860):

But indeed the most unaccountable ready-writer of all is, probably, the common editor of a Daily Newspaper. Consider his leading articles; . . . straw that has been thrashed a hundred times without wheat; ephemeral sound of a sound . . . how a man buckles himself nightly with new vigor and interest to this thrashed straw, nightly thrashes it anew . . . this is a fact remaining still to be accounted for in human physiology.⁴

Samuel Clemens (written in 1873):

That awful power, the public opinion of this nation, is formed and molded by a horde of ignorant self-complacent simpletons who failed at ditching and shoemaking and fetched up in journalism on their way to the poorhouse.⁵

Stephen Crane (written about (1895):

A newspaper is a collection of half-injustices
Which, bawled by boys from mile to mile,
Spreads its curious opinion
To a million merciful and sneering men,
While families cuddle the joys of the fireside
When spurred by tale of lone agony.

A newspaper is a court
Where everyone is kindly and unfairly tried
By a squalor of honest men.

A newspaper is a market
Where wisdom sells its freedom
And melons are crowned by the crowd.

³ Henry David Thoreau, *Walden, or, Life in the Woods*, vol. 2 (Boston: Houghton Mifflin, 1854) pp. 148-49.

⁴ Thomas Carlyle, *Critical and Miscellaneous Essays*, vol. 2 (London: Chapman and Hall, 1899), p. 77.

⁵ Samuel Clemens, *Mark Twain's Speeches* (New York: Harper, 1923), p. 47.

A newspaper is a game
Where his error scores the player victory,
While another's skill wins death.

A newspaper is a symbol;
It is a feckless life's chronicle,
A collection of loud tales
Concentrating eternal stupidities,
That in remote ages lived unaltered,
Roaming through a fenceless world.⁶

As each of the remaining media arrived on the American scene, they too were denounced for their assault on the morals and intelligence of the nation, or at least for bringing about a deterioration of public taste. The motion picture, popular music on radio, comic books, and of course violence on television have all been the subject of accusation, claim, and counter-claim.

But in spite of the intensity of this exchange, and in spite of the respectability, power, and authority of those who have been most vocal in their criticisms, the media continue year after year to deliver to their audiences the same popular and superficial fare! There may be minor fluctuations in the acceptability to the elite of the content of a particular medium during any given period, but in the long run, from their point of view, media content is showing no impressive indications that it is raising its cultural level.

The *tenacity* and *stability* of the mass media generally in the face of such a long history of criticism by powerful voices needs explanation. The problem at first seems deceptively simple. One tempting answer is that the media appeal to the masses and the masses want the kind of content they get and so the media continue to give it to them. Such a conclusion is, of course, correct as far as it goes, but it does not account for the relative ineffectiveness of the critics, who are often, in fact, persons of substantial influence. Unfortunately, also, it is tautolog-

⁶ Quoted in Milton Ellis, Louise Pound, and George W. Spohn, *A College Book of American Literature*, vol. 1 (New York: American Book Company, 1939), p. 704.

ical as well as superficial, and it is more a description than an explanation.

A promising approach to understanding the relationship between mass media content and public taste, and for accounting in part for the remarkable continuity in the (low) cultural level of media content, is provided by viewing the media as *social systems* which operate within a specific external system—the set of social and cultural conditions that is the American society itself.

General sociological theory has become increasingly preoccupied with the nature of social systems. Of particular interest are the functional relationships prevailing between parts of such systems, and the consequences that particular items occurring within the system have in maintaining the stability of the system as a whole. In certain respects, this rise of interest in the analysis of social phenomena as occurring within the boundaries of social systems represents a renewal of interest in the theoretical strategies of the past. A more complex terminology has replaced the outmoded organic lexicons of Spencer and Ward, but there remain many similarities between the sociological analyses of the two periods.

One of the major dissimilarities, however, is that the analysis of social systems concerns itself with the *patterns of action* exhibited by individuals or subgroups who relate themselves to each other within such systems. (The older organic analogies were less specific.) A social system is, for this reason, an *abstraction*—but one not too far removed from the observable and empirically verifiable behaviors of the persons who are doing the acting.

The actions of any given human being generally follow the expectations imposed upon him by the cultural norms of his society and of those who interact with him. Cultural norms, then, in the form of the expectations regarding conduct that people in a group have of each other, are an inseparable part of a social system in reality. Yet, by concentrating not upon such expectations, but upon the visible conduct of people attempting to *fulfill* these expectations, stable systems of social action can be mapped out, various parts or components of such sys-

tems can be identified, and the contributions toward stability made by a given repetitive form of action in a system can be inferred and, hopefully, verified.

We might add that it is clearly recognized that individual human beings who are acting out their roles within a system (or any other stimulus field) have internal feelings, thoughts, attitudes, and other value orientations that are in some part determinants of their action. These internal psychological behaviors in reality play important parts in shaping the manner in which individual actors in a given system of action play out their parts. However, within a particular social system (a given family, community, factory, etc.) the range of variation of these psychological influences cannot be too great or the system would disintegrate. As one leading group of social scientists has put it: "Indeed, one of the most important functional imperatives of the maintenance of social systems is that the value-orientations of the different actors in the same social system must be integrated in some measure in a *common* system. All ongoing social systems do actually show a tendency toward a general system of common cultural orientations. The sharing of value-orientations is especially crucial, although consensus with respect to systems of ideas and expressive symbols are also very important determinants of stability in the social system."⁷

The social system, then, is a complex of stable, repetitive, and patterned action that is in part a manifestation of the culture shared by the actors, and in part a manifestation of the psychological orientations of the actors (which are in turn derived from that culture). The *cultural system*, the *social system*, and the *personality systems* (of the individual actors), therefore, are different kinds of abstractions made from the same basic data, namely, the overt and symbolic behaviors of individual human beings. They are equally legitimate abstractions, each providing in its own right a basis for various kinds of explanations and predictions. Generally speaking, it may be difficult or nearly impossible to analyze or to understand fully one such abstraction without some reference to the others.

⁷ Talcott Parsons and Edward Shils, eds., *Toward a General Theory of Action* (New York: Harper and Row, 1962), p. 24.

But, granted that the term "social system" is a legitimate scientific abstraction, how does this general conceptual strategy help in understanding the mass media of communication? To answer this question, we need to understand in greater detail exactly what is meant by the term *social system*, and what type of analysis it provides. To aid in providing such understanding we turn briefly to several ideas that are important aspects of the study of social systems. One of the most important of these ideas is the concept of the *function* of some particular *repetitive phenomenon* (set of actions) within such a system. For it was with questions about a particular repetitive phenomenon (the continuous production and distribution of media content in "low" cultural taste) that the present chapter began. The fact that such content has long survived the jibes of influential critics was said to require explanation. One form of explanation will be provided by noting the "function" of such a repetitive phenomenon within some stable system of action. The term *function* in the present context means little more than *consequence*. To illustrate briefly, we might hypothesize that the repetitive practice of wearing wedding rings on the part of a given married couple has the function (consequence) of reminding them as well as others that the two are bound together by the obligations and ties that matrimony implies. This practice thereby contributes indirectly to maintaining the permanence of the marriage—the stability of that particular social system. The practice is in a sense "explained" by noting its contribution to the context within which it occurs. A comparison of a number of such systems with and without this particular item (but in other respects matched) would test the assertion.

In the above example, the social system is a relatively simple one. There are only two "components," and each of these happens to be an individual. Their patterns of action are derived both from the individual psychological make-up of the partners and from the cultural norms concerning marriage prevailing in their community, social class, and society. It is a miniature system in equilibrium, although it would not remain long in equilibrium unless the "needs" of the system remained satis-

fied. For example, such a system requires that the partners perform roles that meet the expectations each has of the other and the expectations the community has of married couples. This can be thought of as a "need" for adequate role performance, without which the equilibrium of the system would be endangered. Other "needs," related to economic matters and emotional satisfactions, could be cited.

More complex illustrations of social systems can easily be pointed to, where the "components" of the system are not individual persons, but subsystems. A department store, for example, is a complex social system consisting of the actions of managerial personnel, buyers, sales persons, the clerical staff, customers, transportation workers, stock boys, a janitorial team, and security employees. Each of these components is a smaller system of action within the broader system of the store itself, and it in turn is a complex system of action carried out within the context of the external social conditions of the community. In spite of the complexity, any given set of repetitive actions might be analyzed in terms of its contribution to maintaining the system in equilibrium, or even as contributing to its disequilibrium. The granting to employees of the right to buy merchandise at cost could have the function (consequence) of maintaining their morale and loyalty, and thus such behavior would contribute fairly directly to the maintenance of the system. Rigid insistence on the observance of petty rules, such as docking the pay of an employee who on rare occasions was late for work, might be disruptive of such morale and loyalty, and by contributing to labor turnover it could be *dysfunctional*. Instead of contributing to the maintainance of the system, it could cause disruptions and disequilibrium. Such inductively derived conclusions would be subject to testing for validity, of course, but the functional analysis would have generated the hypothesis to be tested (an important role of theory).

A "functional analysis," then, focuses upon some specific phenomenon occurring within a social system. It then attempts to show how this phenomenon has consequences that contribute to the stability and permanence of the system as a whole. The phenomenon may, of course, have a negative influence, and if

so, it would be said to have "dysfunctions" rather than "functions." The analysis is a strategy for inducing or locating hypotheses that can be tested empirically by comparative studies or other appropriate research methods.

The analysis of social systems is extremely difficult. In fact, this strategy for the study of social phenomena is at the forefront of general sociological theory. There are no infallible rules that specify precisely how to locate and define the exact boundaries of a given social system, particularly if it is relatively complex. There are as yet no completely agreed upon criteria for establishing the linkages between the components of a system, and there are no standard formulae for uncovering the precise contribution that a given repetitive form of action makes to the equilibrium of a system. A functional analysis of the contribution of some item to the stability of a system, then, is a procedure that is somewhat less than completely rigorous. But in spite of this source of potential criticism, this strategy for studying and understanding complex social phenomena seems to hold a great deal of promise.

The basic logic of functional analysis has been described by Hempel with clarity and precision: "The object of the analysis is some 'item' i , which is a relatively persistent trait or disposition . . . occurring in a system s . . . and the analysis aims to show that s is in a state, or internal condition, c_i and in an environment presenting certain external conditions c_e such that under conditions c_i and c_e (jointly referred to as c) the trait i has effects which satisfy some 'need' or 'functional requirement' of s , i.e., a condition n which is necessary for the system's remaining in adequate, or effective, or proper, working order."⁸

How can this type of analysis be applied to the mass media? First, as has been suggested in the previous paragraphs of the present chapter, the portion of the content of the mass media that is in "low" cultural taste or provides gratifications to the mass audience in such a manner that it is widely held to be potentially debasing can be defined as "item i " (in Hempel's

⁸ Carl G. Hempel, "The Logic of Functional Analysis," in Llewellyn Gross, *Symposium on Sociological Theory* (New York: Harper, 1959), p. 280.

terms, above). It is fully recognized that there are very serious problems with such a conceptualization right at the beginning. It would be difficult in practice to construct a *set of categories* under which to analyze the content of the media so that material of "low" cultural taste can readily be identified. It would be difficult, but actually it would not be altogether impossible. Excessive violence, the portrayal of criminal techniques, horror and monster themes, open pornography, suggestive music, and dreary formula melodramas are typical categories of content that arouse the ire of critics. There would probably be considerable disagreement as to the exact content that should be included in any given category. There would also be debates over the number of categories to be used. Nevertheless, it is theoretically possible to identify the content of any given medium that is *most* objected to by the largest number of critics.

We will not actually carry out the exercise for the purposes of the present discussion. However, we will assume that given sufficient time and resources, and using survey techniques, preference scales, attitude measuring instruments, and other research procedures now available that the content of any given medium could be divided roughly into something like the following three categories.

Low-taste content. This would be media content widely distributed and attended to by the mass audience, but which has consistently aroused the ire of critics. Examples would be crime drama on television which emphasizes violence, openly pornographic motion pictures, daytime serials, confession magazines, crime comics, suggestive music, or other content that has been widely held to contribute to a lowering of taste, disruption of morals, or stimulation toward socially unacceptable conduct (whether or not such charges are true).

Nondebated content. This would be media content, widely distributed and attended to, about which media critics have said very little. It is not an issue in the debate over the impact of the media on the masses. Examples would be television weather reports, some news content, music that is neither symphonic nor popular, many magazines devoted to specialized interests, motion pictures using "wholesome" themes, and many others.

Such content is not believed either to elevate or lower tastes, and it is not seen as a threat to moral standards.

High-taste content. This would be media content sometimes widely distributed but not necessarily widely attended to. It is content that media critics feel is in better taste, is morally uplifting, educational, or is in some way inspiring. Examples would be serious music, sophisticated drama, political discussions, art films, or magazines devoted to political commentary. Such content is championed by critics as the opposite of the low-taste material, which they see as distinctly objectionable.

It is, of course, to the *first* of the above categories that we wish to direct most of our attention. This will constitute the "item *i*" in the logical scheme outlined by Hempel. It is the repetitive phenomenon whose contribution to the media (as a social system) needs analysis. However, it would also be possible to study the other two categories with somewhat parallel perspectives, but this will receive relatively little attention in the present discussion.

Having focused upon the repetitive "item *i*," we need now to begin to identify the boundaries of the social system within which this phenomenon occurs, so that eventually the contribution it makes to the system can be inductively hypothesized.

Rather than developing a purely descriptive scheme that will apply only to a single medium, it will be more fruitful to attempt to develop a *general* conceptual scheme into which any or all of the media could be placed, with suitable minor modifications in details. Such a general scheme will emphasize the similarities between media, particularly in terms of relationships between the components in the system. If the same general regularities appear to prevail between the parallel components of several media in much the same way, such a conclusion would suggest that such regularities constitute a *class* of events that follows patterns occurring naturally, given the conditions under which they have been arranged. This, of course, opens the door for explanatory analyses—the inductive construction of hypotheses. The first step in the development of explanatory theory is the location of classes of events that

seem to occur in much the same way, given the presence of specified conditions. This, indeed, may point to the value of a functional analysis, where events are viewed as occurring within social systems. Such a functional analysis itself is not a theory, nor is the description of an abstract social system a theory. This approach is a strategy of investigation that hopefully will identify classes of events and the ways they are related to each other in systematic linkages. These can then become the *explicanda* of deductive nomological theories that are capable of "explanation" in the more rigorous sense.⁹

The first major component of the social system of mass communication is the *audience*. As has been suggested in previous chapters and as is perfectly clear from elementary observation, this is an exceedingly complex component. The audience is stratified, differentiated, and interrelated in the many ways which social scientists have studied for years. The several theories, previously discussed, indicate some of the major variables that play a part in determining how this component will operate within the system. The individual differences theory, the social categories theory, and the social relationships theory all point to behavioral mechanisms that determine the patterns of attention, interpretation, and response of an audience with respect to content of a given type.

The rough typology of content suggested earlier in the present chapter is in some degree related to the characteristics of this audience. Organizations devoted to *research*, to measuring the preferences of media audiences, or to various forms of market research provide information to those responsible for selecting the categories of content that will be distributed to the audience. There is a link, then, between the audience as a component in the system and the market research-rating service organizations as a second component. In purely theoretical terms, both components are role systems themselves, and are thus actually subsystems. This is in a sense a one-way link. For very minor (or usually no) personal reward, the audience member selected for study provides information about himself to such an agency. Information flows from the audience compo-

⁹ For a more complete analysis of these issues, see *ibid.*, pp. 271-76.

ment to the research component, but very little flows back. This linkage between components is by comparison relatively simple.

The content itself, of whatever type, flows from some form of *distributor* to the audience. The role system of the distributor component varies in detail from one medium to another. In addition, there are several somewhat distinct subsystems within this general component. First, there are local outlets, which are likely to be in the most immediate contact with the audience. The local newspaper, the local theater, the local broadcasting station play the most immediate part in placing messages before their respective audiences. But inseparably tied to them are other subsystems of this general component. Newspaper syndicates, broadcasting networks, or chains of movie theaters pass content on to their local outlets. The link between these two subsystems is a two-way one. The local outlet provides money and the larger distributor supplies content. Or, the linkage may be that the local outlet provides a service, and the distributor (who is paid elsewhere) provides money.

The relationship between audience and distributor seems at first to be mostly a one-way link. The distributor provides entertainment content (and often advertising), but the audience provides little back in a direct sense. However, it does provide its *attention*. In fact, it is precisely the attention of the audience that the distributor is attempting to solicit. He sells this "commodity" directly to his financial backer or sponsor. In addition, as we have noted, the audience supplies information to the research component and this is indirectly supplied to the distributor in the form of feedback so that he may gauge the amount of attention he is eliciting. The linkages between components grow more complex as we seek the boundaries of the system.

To the audience, the research, and the distributing components, we may add the role system of the *producer* of content. This component's primary link is with the *financial backer* (or *sponsor*) component and with the distributor, from whom money is obtained and for whom various forms of entertainment content are manufactured. There are a host of subsystems

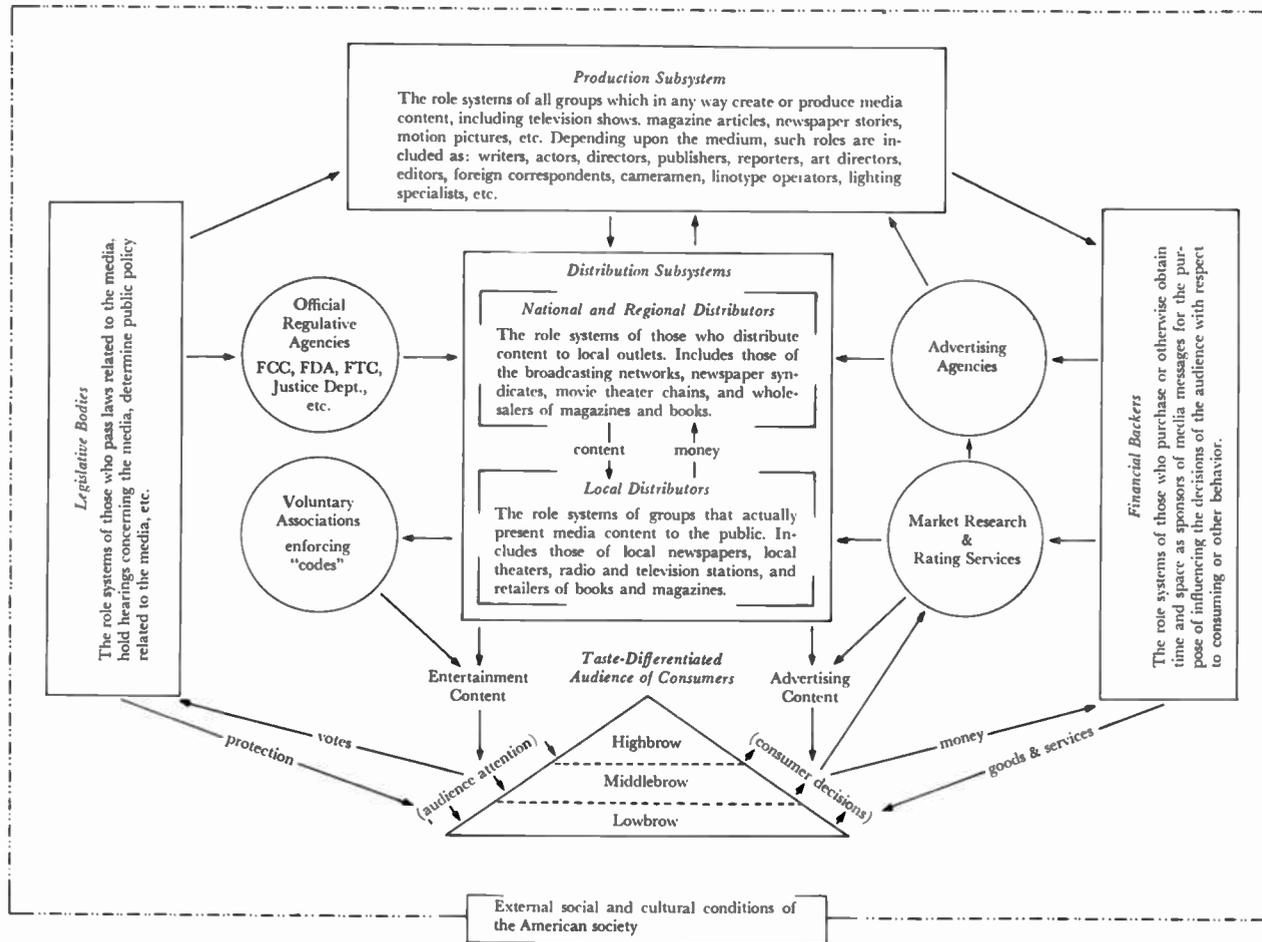


FIGURE 1. SCHEMATIC REPRESENTATION OF THE MASS MEDIA AS SOCIAL SYSTEM

included in this producer component, depending upon the particular medium. Examples are actors, directors, television producers, cameramen, technicians, foreign correspondents, wire service editors, film producers, labor union leaders, publishers, copy editors, clerical staff, and many, many more.

Linking the sponsor, distributor, producer, and research organization are the *advertising agencies*. Paid primarily by the sponsor, this component provides (in return) certain ideas and services. For the most part, it provides the distributor with advertising messages. It may have links with the research component as well.

Over this complex set of interrelated components, there are other subsystems that exert *control*. The legislative bodies, at both the state and national level, which enact regulative statutes concerning the media, constitute an important part of such a control component. Another important part of this role subsystem is the official regulative agencies which implement the policies which have been legislated. The link between the legislative body (control component) and the audience is of course one of votes and public opinion, to which the component is presumably sensitive and dependent. Information lines between audience, legislative bodies, and regulatory agencies are more or less open.

To the regulatory components whose role definitions are found in legal statutes can be added the private voluntary associations that develop "codes" and to some degree serve as a control over the distributors. Such distributors provide them with money, and they in turn provide surveillance and other services.

The regulatory subsystems draw definitions of permissible and nonpermissible content from the general set of *external conditions* within which this extremely complicated system operates. Surrounding the entire structure as an external condition are our society's general norms concerning morality, and the expressions that these find in formal law. Similar, although less likely to be incorporated into law, are our general cultural norms and beliefs regarding what will be likely to entertain or otherwise gratify Americans. Thus we seldom see traditional

Chinese opera, but frequently see western horse opera. We seldom hear the strains of Hindu temple music, but frequently hear the "strains" and other noises of the latest singer whom teenagers admire. If our interests run to more serious fare, we are likely to hear the music of a relatively small list of European or American composers who created their works within a span of about three centuries. Or we are likely to view ballet, opera, drama, etc., of a fairly limited number of artists whose products are defined by our society as of lasting interest.

Each of the several media will fit into this general model of a social system in slightly different ways. A complete description of each of the media separately would be tedious. Indeed, each could well occupy the contents of an entire book. Opatowsky has attempted just such a detailed analysis of the television industry, although he does not use the social system concept.¹⁰

To add to the complexity of this conceptual scheme, it must be remembered that although each medium constitutes a somewhat separate social system in itself, the media are also related *to each other* in systematic ways. Thus, we may speak of the entire set of communication media, including those which have not been specifically analyzed in the present volume, as the mass communication system of the United States.

The structure of this mass communication system has been heavily influenced by the general social, political, economic, and cultural conditions that were current during the period when our mass media were developing and remain as important sociocultural forces in the society within which they operate. Due to their importance for understanding our media as they are today, these conditions were analyzed in some detail in earlier chapters. Our free enterprise beliefs, our views of the legitimacy of the profit motive, the virtues of controlled capitalism, and our general values concerning freedom of speech constitute further *external conditions* (in addition to those related to moral limits and cultural tastes) within which the American mass communication system operates.

Within the system itself, the principal *internal condition* is,

¹⁰ Stan Opatowsky, *TV: The Big Picture* (New York: Collier Books, 1962).

of course, a financial one. Most of the components in the system are occupational role structures which motivate their incumbent personnel primarily through money. To obtain money, they are all ultimately dependent upon the most central component of all—the audience. Unless its decisions to give attention, to purchase, to vote, etc., are made in favorable ways, the system would undergo severe strain and would eventually collapse.

Almost any dramatic change in the behavior of the audience would cause the most severe disruption in the system for any given medium. In an earlier chapter, the swift acquisition of television sets by the movie audience was plotted. The consequence of attention loss to the motion picture theater as a mass medium was shown to be severe.

Such disruptions are infrequent, but they do occur. The key to heading off dramatic changes in audience behavior, of course, is to provide entertainment content of a type that will satisfy and motivate the largest possible number of audience members to carry out their roles in accord with the needs of the system. Such content will, in other words, *maintain the equilibrium of the system*. The ideal, from the standpoint of the system, is content that will capture the audience member's attention, persuade him to purchase goods, and at the same time be sufficiently within the bounds of moral norms and standards of taste so that unfavorable actions by the regulatory components are not provoked.

The type of entertainment content that seems most capable of eliciting the attention of the largest number of audience members is the more dramatic, low-taste content. Films, television plays, newspaper accounts, or magazine stories that stress physical violence, brutality, sexual gratification, earthy humor, slapstick, or simple melodrama appeal most to those whose educational backgrounds are limited. Their prior socialization has not provided them with sensitive standards for appreciation of the arts or for judging the cultural, educational, or moral merits of a given communication within complex frameworks. In the affluent American society, it is this type of audience member who is by far the most numerous. He has purchasing power

in sufficient abundance so that his combined influence on the market can be overwhelming. He is in full possession of the media. He subscribes to a daily paper, has several radio receivers, and owns a television set. He also goes to the movies occasionally. In fact, there are ample data showing that he spends considerably *more* time with the media than his more educated and possibly more affluent fellow citizen. While the college graduate in the middle or upper-middle class is going to a concert, having a bridge party, or attending a play, the family with considerably less education and lower occupational status is happily enjoying a popular comedian or a variety show on their television set. Furthermore, there are about five of the latter type of family for every one of the former. Not only are they considerably more numerous, but they all use laundry detergent, toothpaste, deodorants, gasoline, cigarettes, and beer in the same amount or perhaps to an even greater degree per family than the more well-to-do. In short, they are the most numerous units in the market, units whose tastes must be catered to if the system is to survive. The manufacturer of razor blades who sells millions of his product per day to American men does not care at all if his customer has a college degree or is nearly illiterate. If he shaves and can be persuaded to buy the manufacturer's blades via mass-communicated advertisements, this is all the manufacturer requires. If it takes a western melodrama filled with blood and thunder to attract the consuming unit's attention to the advertisement, so be it. If that small segment of the population who are highly educated or who have refined tastes do not find the end result culturally uplifting, that is just too bad. If they want culture, let them go to the opera. If they turn on their television sets, they had better be prepared to listen to advertisements about razor blades *and* the vehicles that can bring them to the attention of the most massive number of consuming units. No matter what the critics say, these are the elementary facts of economic life within which the American mass communication system operates.

What we have called low-taste content is the key element in the social system of the media. It keeps the entire complex together. By continuously catering to the tastes of those who con-

stitute the largest segment of the market, the financial stability of the system can be maintained. The critic who provokes public attention by denouncing media content or by proclaiming that there is a causal connection between media content and socially undesirable behavior may temporarily receive some recognition. He may also achieve some temporary disturbance in the system, or if he is persistent enough he may ultimately even displace some specific form of low-taste content from a given medium altogether. Thus, if quiz shows are found to be "rigged," or if popular "disc jockeys" are discovered receiving "payola" (a fee for repeatedly playing a song in order to make it popular), the audience may be temporarily disaffected. However, low-taste content comes in such a variety of forms that the temporary or even permanent absence of one minor form does not alter the major picture. Critics have been complaining about newspaper concentration on crime news for a century, and there has been no noticeable abatement in the reporting of such stories. Critics of the soap opera may have breathed a sigh of relief several years ago when these programs at last disappeared from radio. However, their joy must have been short-lived when such daytime serials turned out to be quite popular with television viewers, so popular in fact that at present writing one has even invaded the prime evening hours.

When a formula is discovered for eliciting attention and influencing purchasing decisions from any large segment of the audience, it will be abandoned by the media only with great reluctance, if at all. The broadcast ball game, the star comedian, the family situation comedy, the western thriller, the detective story, the adventures of the private investigator, and the drama of the courtroom now are beginning to rank with such time-honored formulae as the sob story, the funnies, the sex-murder account, the sports page, and the disclosure of corruption in high places as attention-getting devices that can bring the eye or ear of the consumer nearer to the advertising message.

In short, the social system of the mass media in the United States is becoming more and more deeply established. Some future changes can be expected in the kind of content which it will produce to maintain its own equilibrium, but these will be

slow in coming and minor in nature. As the educational level of the average citizen slowly rises in our society, there is some prospect that his tastes will change. On the other hand, as standards of sexual morality become increasingly liberal, the tastes of a slightly more educated mass audience may still demand increasingly frank portrayals in film and television drama. Standards of other types may change or fail to change in equally complex ways.

At present, however, the function of what we have called low-taste content is to maintain the financial equilibrium of *a deeply institutionalized social system which is tightly integrated with the whole of the American economic institution*. The probability that our system of mass communication in this respect can be drastically altered by the occasional outbursts of critics seems small indeed.

In the present volume the mass media have been viewed from a considerable variety of theoretical perspectives, and in each case it was suggested that there was a close link between the general theories of the more basic social sciences and the interpretations students of communication have given of the media. As these general images of man have changed, so have theories of mass communication. To some it may appear that a considerable inefficiency of effort is involved. This may be true. But hopefully, these changes, revisions, and new directions have not been simple random variations. Bit by bit, the development of theory in mass communication, with a corresponding accumulation of supporting empirical evidence, will enable us to understand better how societies influence their media, how the communicative act takes place via the mass media, and how mass communication content influences the members of society.

HAROLD D. LASSWELL

*The Structure and Function
of Communication in Society*

This is one of the classic papers with which Lasswell did so much to structure the thinking of a whole generation of communication scholars and students. It contains his well-known formula for describing communication (who says what in which channel to whom with what effect), and also his analysis of the functions of communication in society. Unlike DeFleur, who saw "low-taste" material as central in the social communication system, Lasswell did not even mention entertainment as a primary function of communication. Later commentators have added that to his list, however. They have also suggested that contributions to the economic system would be a primary function of mass media in a country like the United States. Dr. Lasswell is a professor of law at Yale. This paper was published in *The Communication of Ideas*, edited by Lyman Bryson, published and copyrighted by the Institute for Religious and Social Studies, New York, in 1948. It is here reprinted by permission of the author and the publisher.

The Act of Communication

A CONVENIENT WAY to describe an act of communication is to answer the following questions:

Who
Says What
In Which Channel
To Whom
With What Effect?

The scientific study of the process of communication tends to concentrate upon one or another of these questions. Scholars who study the "who," the communicator, look into the factors that initiate and guide the act of communication. We call this subdivision of the field of research *control analysis*. Specialists who focus upon the "says what" engage in *content analysis*. Those who look primarily at the radio, press, film, and other channels of communication are doing *media analysis*. When

the principal concern is with the persons reached by the media, we speak of *audience analysis*. If the question is the impact upon audiences, the problem is *effect analysis*.

Whether such distinctions are useful depends entirely upon the degree of refinement which is regarded as appropriate to a given scientific and managerial objective. Often it is simpler to combine audience and effect analysis, for instance, than to keep them apart. On the other hand, we may want to concentrate on the analysis of content, and for this purpose subdivide the field into the study of purport and style, the first referring to the message, and the second to the arrangement of the elements of which the message is composed.

Structure and Function

Enticing as it is to work out these categories in more detail, the present discussion has a different scope. We are less interested in dividing up the act of communication than in viewing the act as a whole in relation to the entire social process. Any process can be examined in two frames of reference, namely, structure and function; and our analysis of communication will deal with the specializations that carry on certain functions, of which the following may be clearly distinguished: (1) the surveillance of the environment; (2) the correlation of the parts of society in responding to the environment; (3) the transmission of the social heritage from one generation to the next.

Biological Equivalences

At the risk of calling up false analogies, we can gain perspective on human societies when we note the degree to which communication is a feature of life at every level. A vital entity, whether relatively isolated or in association, has specialized ways of receiving stimuli from the environment. The single-celled organism or the many-membered group tends to maintain an internal equilibrium and to respond to changes in the environment in a way that maintains this equilibrium. The responding process calls for specialized ways of bringing the parts

of the whole into harmonious action. Multi-celled animals specialize cells to the function of external contact and internal correlation. Thus, among the primates, specialization is exemplified by organs such as the ear and eye, and the nervous system itself. When the stimuli receiving and disseminating patterns operate smoothly, the several parts of the animal act in concert in reference to the environment ("feeding," "fleeing," "attacking").¹

In some animal societies certain members perform specialized roles, and survey the environment. Individuals act as "sentinels," standing apart from the herd or flock and creating a disturbance whenever an alarming change occurs in the surroundings. The trumpeting, cackling, or shrilling of the sentinel is enough to set the herd in motion. Among the activities engaged in by specialized "leaders" is the internal stimulation of "followers" to adapt in an orderly manner to the circumstances heralded by the sentinels.

Within a single, highly differentiated organism, incoming nervous impulses and outgoing impulses are transmitted along fibers that make synaptic junction with other fibers. The critical points in the process occur at the relay stations, where the arriving impulse may be too weak to reach the threshold which stirs the next link into action. At the higher centers, separate currents modify one another, producing results that differ in many ways from the outcome when each is allowed to continue a separate path. At any relay station there is no conductance, total conductance, or intermediate conductance. The same categories apply to what goes on among members of an animal society. The sly fox may approach the barnyard in a way that supplies too meager stimuli for the sentinel to sound the alarm. Or the attacking animal may eliminate the sentinel before he makes more than a feeble outcry. Obviously there is every gradation possible between total conductance and no conductance.

¹To the extent that behavior patterns are transmitted in the structures inherited by the single animal, a function is performed parallel to the transmission of the "social heritage" by means of education.

Attention in World Society

When we examine the process of communication of any state in the world community, we note three categories of specialists. One group surveys the political environment of the state as a whole, another correlates the response of the whole state to the environment, and the third transmits certain patterns of response from the old to the young. Diplomats, attachés, and foreign correspondents are representative of those who specialize on the environment. Editors, journalists, and speakers are correlators of the internal response. Educators in family and school transmit the social inheritance.

Communications which originate abroad pass through sequences in which various senders and receivers are linked with one another. Subject to modification at each relay point in the chain, messages originating with a diplomat or foreign correspondent may pass through editorial desks and eventually reach large audiences.

If we think of the world attention process as a series of *attention frames*, it is possible to describe the rate at which comparable content is brought to the notice of individuals and groups. We can inquire into the point at which "conductance" no longer occurs; and we can look into the range between "total conductance" and "minimum conductance." The metropolitan and political centers of the world have much in common with the interdependence, differentiation, and activity of the cortical or subcortical centers of an individual organism. Hence the attention frames found in these spots are the most variable, refined, and interactive of all frames in the world community.

At the other extreme are the attention frames of primitive inhabitants of isolated areas. Not that folk cultures are wholly untouched by industrial civilization. Whether we parachute into the interior of New Guinea, or land on the slopes of the Himalayas, we find no tribe wholly out of contact with the world. The long threads of trade, of missionary zeal, of adven-

turous exploration and scientific field study, and of global war reach far distant places. No one is entirely out of this world.

Among primitives the final shape taken by communication is the ballad or tale. Remote happenings in the great world of affairs, happenings that come to the notice of metropolitan audiences, are reflected, however dimly, in the thematic material of ballad singers and reciters. In these creations faraway political leaders may be shown supplying land to the peasants or restoring an abundance of game to the hills.

When we push upstream of the flow of communication, we note that the immediate relay function for nomadic and remote tribesmen is sometimes performed by the inhabitants of settled villages with whom they come in occasional contact. The relay can be the school teacher, doctor, judge, tax collector, policeman, soldier, peddler, salesman, missionary, student; in any case he is an assembly point of news and comment.

More Detailed Equivalences

The communication processes of human society, when examined in detail, reveal many equivalences to the specializations found in the physical organism and in the lower animal societies. The diplomats, for instance, of a single state are stationed all over the world and send messages to a few focal points. Obviously, these incoming reports move from the many to the few, where they interact upon one another. Later on, the sequence spreads fanwise according to a few-to-many pattern, as when a foreign secretary gives a speech in public, an article is put out in the press, or a news film is distributed to the theaters. The lines leading from the outer environment of the state are functionally equivalent to the afferent channels that convey incoming nervous impulses to the central nervous system of a single animal, and to the means by which alarm is spread among a flock. Outgoing, or efferent, impulses display corresponding parallels.

The central nervous system of the body is only partly involved in the entire flow of afferent-efferent impulses. There are automatic systems that can act on one another without in-

volving the "higher" centers at all. The stability of the internal environment is maintained principally through the mediation of the vegetative or autonomic specializations of the nervous system. Similarly, most of the messages within any state do not involve the central channels of communication. They take place within families, neighborhoods, shops, field gangs, and other local contexts. Most of the educational process is carried on the same way.

A further set of significant equivalences is related to the circuits of communication, which are predominantly one-way or two-way, depending upon the degree of reciprocity between communicators and audience. Or, to express it differently, two-way communication occurs when the sending and receiving functions are performed with equal frequency by two or more persons. A conversation is usually assumed to be a pattern of two-way communication (although monologues are hardly unknown). The modern instruments of mass communication give an enormous advantage to the controllers of printing plants, broadcasting equipment, and other forms of fixed and specialized capital. But it should be noted that audiences do "talk back," after some delay; and many controllers of mass media use scientific methods of sampling in order to expedite this closing of the circuit.

Circuits of two-way contact are particularly in evidence among the great metropolitan, political, and cultural centers of the world. New York, Moscow, London, and Paris, for example, are in intense two-way contact, even when the flow is severely curtailed in volume (as between Moscow and New York). Even insignificant sites become world centers when they are transformed into capital cities (Canberra, Australia; Ankara, Turkey; the District of Columbia, U.S.A.). A cultural center like Vatican City is in intense two-way relationship with the dominant centers throughout the world. Even specialized production centers like Hollywood, despite their preponderance of outgoing material, receive an enormous volume of messages.

A further distinction can be made between message controlling and message handling centers and social formations. The

message center in the vast Pentagon Building of the War Department in Washington transmits with no more than accidental change incoming messages to addressees. This is the role of the printers and distributors of books; of dispatchers, linemen, and messengers connected with telegraphic communication; of radio engineers and other technicians associated with broadcasting. Such message handlers may be contrasted with those who affect the content of what is said, which is the function of editors, censors, and propagandists. Speaking of the symbol specialists as a whole, therefore, we separate them into the manipulators (controllers) and the handlers; the first group typically modifies content, while the second does not.

Needs and Values

Though we have noted a number of functional and structural equivalences between communication in human societies and other living entities, it is not implied that we can most fruitfully investigate the process of communication in America or the world by the methods most appropriate to research on the lower animals or on single physical organisms. In comparative psychology when we describe some part of the surroundings of a rat, cat, or monkey as a stimulus (that is, as part of the environment reaching the attention of the animal), we cannot ask the rat; we use other means of inferring perception. When human beings are our objects of investigation, we can interview the great "talking animal." (This is not that we take everything at face value. Sometimes we forecast the opposite of what the person says he intends to do. In this case, we depend on other indications, both verbal and nonverbal.)

In the study of living forms, it is rewarding, as we have said, to look at them as modifiers of the environment in the process of gratifying needs, and hence of maintaining a steady state of internal equilibrium. Food, sex, and other activities which involve the environment can be examined on a comparative basis. Since human beings exhibit speech reactions, we can investigate many more relationships than in the nonhuman spe-

cies.² Allowing for the data furnished by speech (and other communicative acts), we can investigate human society in terms of values; that is, in reference to categories of relationships that are recognized objects of gratification. In America, for example, it requires no elaborate technique of study to discern that power and respect are values. We can demonstrate this by listening to testimony, and by watching what is done when opportunity is afforded.

It is possible to establish a list of values current in any group chosen for investigation. Further than this, we can discover the rank order in which these values are sought. We can rank the members of the group according to their positions in relation to the values. So far as industrial civilization is concerned, we have no hesitation in saying that power, wealth, respect, well-being, and enlightenment are among the values. If we stop with this list, which is not exhaustive, we can describe on the basis of available knowledge (fragmentary though it may often be) the social structure of most of the world. Since values are not equally distributed, the social structure reveals more or less concentration of relatively abundant shares of power, wealth, and other values in a few hands. In some places this concentration is passed on from generation to generation, forming castes rather than a mobile society.

In every society the values are shaped and distributed according to more or less distinctive patterns (*institutions*). The institutions include communications which are invoked in support of the network as a whole. Such communications are the ideology; and in relation to power we can differentiate the political *doctrine*, the political *formula*, and the *miranda*.³ These are illustrated in the United States by the doctrine of individualism, the paragraphs of the Constitution, which are the for-

² Properly handled, the speech event can be described with as much reliability and validity as many nonspeech events which are more conventionally used as data in scientific investigations.

³ These distinctions are derived and adapted from the writings of Charles E. Merriam, Gaetano Mosca, Karl Mannheim, and others. For a systematic exposition, see Harold D. Lasswell and Abraham Kaplan, *Power and Society* (New Haven: Yale University Press, 1950).

mula, and the ceremonies and legends of public life, which comprise the miranda. The ideology is communicated to the rising generation through such specialized agencies as the home and school.

Ideology is only part of the myths of any given society. There may be counterideologies directed against the dominant doctrine, formula, and miranda. Today the power structure of world politics is deeply affected by ideological conflict, and by the role of two giant powers, the United States and Russia. The ruling elites view one another as potential enemies, not only in the sense that interstate differences may be settled by war, but in the more urgent sense that the ideology of the other may appeal to disaffected elements at home and weaken the internal power position of each ruling class.

Social Conflict and Communication

Under the circumstances, one ruling element is especially alert to the other, and relies upon communication as a means of preserving power. One function of communication, therefore, is to provide intelligence about what the other elite is doing, and about its strength. Fearful that intelligence channels will be controlled by the other, in order to withhold and distort, there is a tendency to resort to secret surveillance. Hence international espionage is intensified above its usual level in peacetime. Moreover, efforts are made to "black out" the self in order to counteract the scrutiny of the potential enemy. In addition, communication is employed affirmatively for the purpose of establishing contact with audiences within the frontiers of the other power.

These varied activities are manifested in the use of open and secret agents to scrutinize the other, in counterintelligence work, in censorship and travel restriction, in broadcasting and other informational activities across frontiers.

Ruling elites are also sensitized to potential threats in the internal environment. Besides using open sources of information, secret measures are also adopted. Precautions are taken to impose "security" upon as many policy matters as possible. At the

same time, the ideology of the elite is reaffirmed, and counter-ideologies are suppressed.

The processes here sketched run parallel to phenomena to be observed throughout the animal kingdom. Specialized agencies are used to keep aware of threats and opportunities in the external environment. The parallels include the surveillance exercised over the internal environment, since among the lower animals some herd leaders sometimes give evidence of fearing attack on two fronts, internal and external; they keep an uneasy eye on both environments. As a means of preventing surveillance by an enemy, well-known devices are at the disposal of certain species, e.g., the squid's use of a liquid fog screen, the protective coloration of the chameleon. However, there appears to be no correlate of the distinction between the "secret" and "open" channels of human society.

Inside a physical organism the closest parallel to social revolution would be the growth of new nervous connections with parts of the body that rival, and can take the place of, the existing structures of central integration. Can this be said to occur as the embryo develops in the mother's body? Or, if we take a destructive, as distinct from a reconstructive, process, can we properly say that internal surveillance occurs in regard to cancer, since cancers compete for the food supplies of the body?

Efficient Communication

The analysis up to the present implies certain criteria of efficiency or inefficiency in communication. In human societies the process is efficient to the degree that rational judgments are facilitated. A rational judgment implements value goals. In animal societies communication is efficient when it aids survival, or some other specified need of the aggregate. The same criteria can be applied to the single organism.

One task of a rationally organized society is to discover and control any factors that interfere with efficient communication. Some limiting factors are psychotechnical. Destructive radiation, for instance, may be present in the environment, yet re-

main undetected owing to the limited range of the unaided organism.

But even technical insufficiencies can be overcome by knowledge. In recent years shortwave broadcasting has been interfered with by disturbances which will either be surmounted, or will eventually lead to the abandonment of this mode of broadcasting. During the past few years advances have been made toward providing satisfactory substitutes for defective hearing and seeing. A less dramatic, though no less important, development has been the discovery of how inadequate reading habits can be corrected.

There are, of course, deliberate obstacles put in the way of communication, like censorship and drastic curtailment of travel. To some extent obstacles can be surmounted by skillful evasion, but in the long run it will doubtless be more efficient to get rid of them by consent or coercion.

Sheer ignorance is a pervasive factor whose consequences have never been adequately assessed. Ignorance here means the absence, at a given point in the process of communication, of knowledge which is available elsewhere in society. Lacking proper training, the personnel engaged in gathering and disseminating intelligence is continually misconstruing or overlooking the facts, if we define the facts as what the objective, trained observer could find.

In accounting for inefficiency we must not overlook the low evaluations put upon skill in relevant communication. Too often irrelevant, or positively distorting, performances command prestige. In the interest of a "scoop," the reporter gives a sensational twist to a mild international conference, and contributes to the popular image of international politics as chronic, intense conflict, and little else. Specialists in communication often fail to keep up with the expansion of knowledge about the process; note the reluctance with which many visual devices have been adopted. And despite research on vocabulary, many mass communicators select words that fail. This happens, for instance, when a foreign correspondent allows himself to become absorbed in the foreign scene and forgets

that his home audience has no direct equivalents in experience for "left," "center," and other factional terms.

Besides skill factors, the level of efficiency is sometimes adversely influenced by personality structure. An optimistic, outgoing person may hunt "birds of a feather" and gain an uncorrected and hence exaggeratedly optimistic view of events. On the contrary, when pessimistic, brooding personalities mix, they choose quite different birds, who confirm their gloom. There are also important differences among people which spring from contrasts in intelligence and energy.

Some of the most serious threats to efficient communication for the community as a whole relate to the values of power, wealth, and respect. Perhaps the most striking examples of power distortion occur when the content of communication is deliberately adjusted to fit an ideology or counterideology. Distortions related to wealth not only arise from attempts to influence the market, for instance, but from rigid conceptions of economic interest. A typical instance of inefficiencies connected with respect (social class) occurs when an upper-class person mixes only with persons of his own stratum and forgets to correct his perspective by being exposed to members of other classes.

Research in Communication

The foregoing reminders of some factors that interfere with efficient communication point to the kinds of research which can usefully be conducted on representative links in the chain of communication. Each agent is a vortex of interacting environmental and predispositional factors. Whoever performs a relay function can be examined in relation to input and output. What statements are brought to the attention of the relay link? What does he pass on verbatim? What does he drop out? What does he rework? What does he add? How do differences in input and output correlate with culture and personality? By answering such questions it is possible to weigh the various factors in conductance, no conductance, and modified conductance.

Besides the relay link, we must consider the primary link in a communication sequence. In studying the focus of attention of the primary observer, we emphasize two sets of influences: statements to which he is exposed; other features of his environment. An attaché or foreign correspondent exposes himself to mass media and private talk; also, he can count soldiers, measure gun emplacements, note hours of work in a factory, see butter and fat on the table.

Actually it is useful to consider the attention frame of the relay as well as the primary link in terms of media and nonmedia exposures. The role of nonmedia factors is very slight in the case of many relay operators, while it is certain to be significant in accounting for the primary observer.

Attention Aggregates and Publics

It should be pointed out that everyone is not a member of the world public, even though he belongs to some extent to the world attention aggregate. To belong to an attention aggregate it is only necessary to have common symbols of reference. Everyone who has a symbol of reference for New York, North America, the western hemisphere, or the globe is a member respectively of the attention aggregate of New York, North America, the western hemisphere, the globe. To be a member of the New York public, however, it is essential to make demands for public action in New York, or expressly affecting New York.

The public of the United States, for instance, is not confined to residents or citizens, since noncitizens who live beyond the frontier may try to influence American politics. Conversely, everyone who lives in the United States is not a member of the American public, since something more than passive attention is necessary. An individual passes from an attention aggregate to the public when he begins to expect that what he wants can affect public policy.

Sentiment Groups and Publics

A further limitation must be taken into account before we can correctly classify a specific person or group as part of a pub-

lic. The demands made regarding public policy must be debatable. The world public is relatively weak and undeveloped, partly because it is typically kept subordinate to sentiment areas in which no debate is permitted on policy matters. During a war or war crisis, for instance, the inhabitants of a region are overwhelmingly committed to impose certain policies on others. Since the outcome of the conflict depends on violence, and not debate, there is no public under such conditions. There is a network of sentiment groups that act as crowds, hence tolerate no dissent.⁴

From the foregoing analysis it is clear that there are attention, public, and sentiment areas of many degrees of inclusiveness in world politics. These areas are interrelated with the structural and functional features of world society, and especially of world power. It is evident, for instance, that *the strongest powers tend to be included in the same attention area*, since their ruling elites focus on one another as the source of great potential threat. The strongest powers usually pay proportionately less attention to the weaker powers than the weaker powers pay to them, since stronger powers are typically more important sources of threat, or of protection, for weaker powers than the weaker powers are for the stronger.⁵

The attention structure within a state is a valuable index of the degree of state integration. When the ruling classes fear the masses, the rulers do not share their picture of reality with the rank and file. When the reality picture of kings, presidents, and cabinets is not permitted to circulate through the state as a whole, the degree of discrepancy shows the extent to which the ruling groups assume that their power depends on distortion.

Or, to express the matter another way, if the "truth" is not

⁴ The distinction between the "crowd" and the "public" was worked out in the Italian, French, and German literature of criticism that grew up around Le Bon's overgeneralized use of the crowd concept. For a summary of this literature by a scholar who later became one of the most productive social scientists in this field, see Robert E. Park, *Masse und Publikum; Eine methodologische und soziologische Untersuchung* (Berne: Lack and Grunau, 1904).

⁵ The propositions in this paragraph are hypotheses capable of being subsumed under the general theory of power, referred to in n. 3. See also Harold D. Lasswell and Joseph M. Goldsen, "Public Attention, Opinion and Action," *The International Journal of Opinion and Attitude Research* 1 (1947): 3-11.

shared, the ruling elements expect internal conflict, rather than harmonious adjustment to the external environment of the state. Hence the channels of communication are controlled in the hope of organizing the attention of the community at large in such a way that only responses will be forthcoming which are deemed favorable to the power position of the ruling classes.

The Principle of Equivalent Enlightenment

It is often said in democratic theory that rational public opinion depends upon enlightenment. There is, however, much ambiguity about the nature of enlightenment, and the term is often made equivalent to perfect knowledge. A more modest and immediate conception is not perfect but equivalent enlightenment. The attention structure of the full-time specialist on a given policy will be more elaborate and refined than that of the layman. That this difference will always exist, we must take for granted. Nevertheless, it is quite possible for the specialist and the layman to agree on the broad outlines of reality. A workable goal of democratic society is equivalent enlightenment as between expert, leader, and layman.

Expert, leader, and layman can have the same gross estimate of major population trends of the world. They can share the same general view of the likelihood of war. It is by no means fantastic to imagine that the controllers of mass media of communication will take the lead in bringing about a high degree of equivalence throughout society between the layman's picture of significant relationships, and the picture of the expert and the leader.

Summary

The communication process in society performs three functions: (a) *surveillance* of the environment, disclosing threats and opportunities affecting the value position of the community and of the component parts within it; (b) *correlation* of the components of society in making a response to the environ-

ment; (c) *transmission* of the social inheritance. In general, biological equivalents can be found in human and animal associations, and within the economy of a single organism.

In society, the communication process reveals special characteristics when the ruling element is afraid of the internal as well as the external environment. In gauging the efficiency of communication in any given context, it is necessary to take into account the values at stake, and the identity of the group whose position is being examined. In democratic societies, rational choices depend on enlightenment, which in turn depends upon communication; and especially upon the equivalence of attention among leaders, experts, and rank and file.

MARSHALL MCLUHAN

The Medium Is the Message

Marshall McLuhan's name will need no introduction to readers of this book, because he is perhaps the most widely known of contemporary writers on mass communication. This paper is the first chapter of his *Understanding Media: The Extensions of Man* (published and copyrighted by McGraw-Hill, New York, 1966). In it are found many of his best-known concepts—such as the one in the title, and the idea that literacy has “detrribalized” man (although television may “retribalize” him). It is also a good introduction to his style—the combination of humanistic background and perceptual theory, the fresh way of looking at things, and the somewhat cryptic way of saying things, that have shocked, sometimes irritated, and usually stimulated readers of many kinds in many places. For example, if pushed, he would probably admit that some of the human effects of media derive from the content as well as the medium, in other words that the message is partly the message. But by his phrase, “The medium is the message,” he has succeeded in jerking his readers out of old patterns of thought and into a new way of looking at the effects of mass communication. (For a useful summary and interpretation of McLuhan's ideas, the reader may want to turn to an essay by James W. Carey, “Harold Adams Innis and Marshall McLuhan,” *The Antioch Review* 27, no. 1 (1967): 5–39.) McLuhan's paper is published here by permission of the publisher and copyright holder.

IN A CULTURE like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium—that is, of any extension of ourselves—result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology. Thus, with automation, for example, the new patterns of human association tend to eliminate jobs, it is true. That is the negative result. Positively, automation creates roles for people, which is to say depth of involvement in their work and human association that our preceding mechanical technol-

ogy had destroyed. Many people would be disposed to say that it was not the machine, but what one did with the machine, that was its meaning or message. In terms of the ways in which the machine altered our relations to one another and to ourselves, it mattered not in the least whether it turned out cornflakes or Cadillacs. The restructuring of human work and association was shaped by the technique of fragmentation that is the essence of machine technology. The essence of automation technology is the opposite. It is integral and decentralist in depth, just as the machine was fragmentary, centralist, and superficial in its patterning of human relationships.

The instance of the electric light may prove illuminating in this connection. The electric light is pure information. It is a medium without a message, as it were, unless it is used to spell out some verbal ad or name. This fact, characteristic of all media, means that the "content" of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked, "What is the content of speech?" it is necessary to say, "It is an actual process of thought, which is in itself nonverbal." An abstract painting represents direct manifestation of creative thought processes as they might appear in computer designs. What we are considering here, however, are the psychic and social consequences of the designs or patterns as they amplify or accelerate existing processes. For the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs. The railway did not introduce movement or transportation or wheel or road into human society, but it accelerated and enlarged the scale of previous human functions, creating totally new kinds of cities and new kinds of work and leisure. This happened whether the railway functioned in a tropical or a northern environment, and is quite independent of the freight or content of the railway medium. The airplane, on the other hand, by accelerating the rate of transportation, tends to dissolve the railway form of city, politics, and association, quite independently of what the airplane is used for.

Let us return to the electric light. Whether the light is being used for brain surgery or night baseball is a matter of indifference. It could be argued that these activities are in some way the "content" of the electric light, since they could not exist without the electric light. This fact merely underlines the point that "the medium is the message" because it is the medium that shapes and controls the scale and form of human association and action. The content or uses of such media are as diverse as they are ineffectual in shaping the form of human association. Indeed, it is only too typical that the "content" of any medium blinds us to the character of the medium. It is only today that industries have become aware of the various kinds of business in which they are engaged. When IBM discovered that it was not in the business of making office equipment or business machines, but that it was in the business of processing information, then it began to navigate with clear vision. The General Electric Company makes a considerable portion of its profits from electric light bulbs and lighting systems. It has not yet discovered that, quite as much as A.T.&T., it is in the business of moving information.

The electric light escapes attention as a communication medium just because it has no "content." And this makes it an invaluable instance of how people fail to study media at all. For it is not till the electric light is used to spell out some brand name that it is noticed as a medium. Then it is not the light but the "content" (or what is really another medium) that is noticed. The message of the electric light is like the message of electric power in industry, totally radical, pervasive, and decentralized. For electric light and power are separate from their uses, yet they eliminate time and space factors in human association exactly as do radio, telegraph, telephone, and TV, creating involvement in depth.

A fairly complete handbook for studying the extensions of man could be made up from selections from Shakespeare. Some might quibble about whether or not he was referring to TV in these familiar lines from *Romeo and Juliet*:

But soft! what light through yonder window breaks?
It speaks, and yet says nothing.

In *Othello*, which, as much as *King Lear*, is concerned with the torment of people transformed by illusions, there are these lines that bespeak Shakespeare's intuition of the transforming powers of new media:

Is there not charms
By which the property of youth and maidhood
May be abus'd? Have you not read Roderigo,
Of some such thing?

In Shakespeare's *Troilus and Cressida*, which is almost completely devoted to both a psychic and social study of communication, Shakespeare states his awareness that true social and political navigation depend upon anticipating the consequences of innovation:

The providence that's in a watchful state
Knows almost every grain of Plutus' gold,
Finds bottom in the uncomprehensive deeps,
Keeps place with thought, and almost like the gods
Does thoughts unveil in their dumb cradles.

The increasing awareness of the action of media, quite independently of their "content" or programming, was indicated in the annoyed and anonymous stanza:

In modern thought, (if not in fact)
Nothing is that doesn't act,
So that is reckoned wisdom which
Describes the scratch but not the itch.

The same kind of total, configurational awareness that reveals why the medium is socially the message has occurred in the most recent and radical medical theories. In his *Stress of Life*, Hans Selye tells of the dismay of a research colleague on hearing of Selye's theory:

When he saw me thus launched on yet another enraptured description of what I had observed in animals treated with this or that impure, toxic material, he looked at me with desperately sad eyes and said in obvious despair: "But Selye, try to realize what you are doing before it is too late! You have now decided to spend your entire life studying the pharmacology of dirt!"

As Selye deals with the total environmental situation in his "stress" theory of disease, so the latest approach to media study considers not only the "content" but the medium and the cultural matrix within which the particular medium operates. The older unawareness of the psychic and social effects of media can be illustrated from almost any of the conventional pronouncements.

In accepting an honorary degree from Notre Dame a few years ago, David Sarnoff made this statement: "We are too prone to make technological instruments the scapegoats for the sins of those who wield them. The products of modern science are not in themselves good or bad; it is the way they are used that determines their value." That is the voice of the current somnambulism. Suppose we were to say, "Apple pie is in itself neither good nor bad; it is the way it is used that determines its value." Or, "The smallpox virus is in itself neither good nor bad; it is the way it is used that determines its value." Again, "Firearms are in themselves neither good nor bad; it is the way they are used that determines their value." That is, if the slugs reach the right people, firearms are good. If the TV tube fires the right ammunition at the right people, it is good. I am not being perverse. There is simply nothing in the Sarnoff statement that will bear scrutiny, for it ignores the nature of the medium, of any and all media, in the true Narcissus style of one hypnotized by the amputation and extension of his own being in a new technical form. Sarnoff went on to explain his attitude to the technology of print, saying that it was true that print caused much trash to circulate, but it had also disseminated the Bible and the thoughts of seers and philosophers. It has never occurred to Sarnoff that any technology could do anything but *add* itself on to what we already are.

Such economists as Robert Theobald, W. W. Rostow, and John Kenneth Galbraith have been explaining for years how it is that "classical economics" cannot explain change or growth. And the paradox of mechanization is that although it is itself the cause of maximal growth and change, the principle of mechanization excludes the very possibility of growth or the understanding of change. For mechanization is achieved by

fragmentation of any process and by putting the fragmented parts in a series. Yet, as David Hume showed in the eighteenth century, there is no principle of causality in a mere sequence. That one thing follows another accounts for nothing. Nothing follows from following, except change. So the greatest of all reversals occurred with electricity, that ended sequence by making things instant. With instant speed the causes of things began to emerge to awareness again, as they had not done with things in sequence and in concatenation accordingly. Instead of asking which came first, the chicken or the egg, it suddenly seemed that a chicken was an egg's idea for getting more eggs.

Just before an airplane breaks the sound barrier, sound waves become visible on the wings of the plane. The sudden visibility of sound just as sound ends is an apt instance of that great pattern of being that reveals new and opposite forms just as the earlier forms reach their peak performance. Mechanization was never so vividly fragmented or sequential as in the birth of the movies, the moment that translated us beyond mechanism into the world of growth and organic interrelation. The movie, by sheer speeding up the mechanical, carried us from the world of sequence and connections into the world of creative configuration and structure. The message of the movie medium is that of transition from lineal connections to configurations. It is the transition that produced the now quite correct observation: "If it works, it's obsolete." When electric speed further takes over from mechanical movie sequences, then the lines of force in structures and in media become loud and clear. We return to the inclusive form of the icon.

To a highly literate and mechanized culture the movie appeared as a world of triumphant illusions and dreams that money could buy. It was at this moment of the movie that cubism occurred, and it has been described by E. H. Gombrich (*Art and Illusion*) as "the most radical attempt to stamp out ambiguity and to enforce one reading of the picture—that of a man-made construction, a colored canvas." For cubism substitutes all facets of an object simultaneously for the "point of view" or facet of perspective illusion. Instead of the specialized illusion of the third dimension on canvas, cubism sets up an in-

terplay of planes and contradiction or dramatic conflict of patterns, lights, textures that "drives home the message" by involvement. This is held by many to be an exercise in painting, not in illusion.

In other words, cubism, by giving the inside and outside, the top, bottom, back, and front and the rest, in two dimensions, drops the illusion of perspective in favor of instant sensory awareness of the whole. Cubism, by seizing on instant total awareness, suddenly announced that *the medium is the message*. Is it not evident that the moment that sequence yields to the simultaneous, one is in the world of the structure and of configuration? Is that not what has happened in physics as in painting, poetry, and in communication? Specialized segments of attention have shifted to total field, and we can now say, "The medium is the message" quite naturally. Before the electric speed and total field, it was not obvious that the medium is the message. The message, it seemed, was the "content," as people used to ask what a painting was *about*. Yet they never thought to ask what a melody was about, nor what a house or a dress was about. In such matters, people retained some sense of the whole pattern, of form and function as a unity. But in the electric age this integral idea of structure and configuration has become so prevalent that educational theory has taken up the matter. Instead of working with specialized "problems" in arithmetic, the structural approach now follows the linea of force in the field of number and has small children meditating about number theory and "sets."

Cardinal Newman said of Napoleon, "He understood the grammar of gunpowder." Napoleon had paid some attention to other media as well, especially the semaphore telegraph that gave him a great advantage over his enemies. He is on record for saying that "three hostile newspapers are more to be feared than a thousand bayonets."

Alexis de Tocqueville was the first to master the grammar of print and typography. He was thus able to read off the message of coming change in France and America as if he were reading aloud from a text that had been handed to him. In fact, the nineteenth century in France and in America was just such an

open book to de Tocqueville because he had learned the grammar of print. So he, also, knew when that grammar did not apply. He was asked why he did not write a book on England, since he knew and admired England. He replied:

One would have to have an unusual degree of philosophical folly to believe oneself able to judge England in six months. A year always seemed to me too short a time in which to appreciate the United States properly, and it is much easier to acquire clear and precise notions about the American Union than about Great Britain. In America all laws derive in a sense from the same line of thought. The whole of society, so to speak, is founded upon a single fact; everything springs from a simple principle. One could compare America to a forest pierced by a multitude of straight roads all converging on the same point. One has only to find the center and everything is revealed at a glance. But in England the paths run criss-cross, and it is only by travelling down each one of them that one can build up a picture of the whole.

De Tocqueville, in earlier work on the French Revolution, had explained how it was the printed word that, achieving cultural saturation in the eighteenth century, had homogenized the French nation. Frenchmen were the same kind of people from north to south. The typographic principles of uniformity, continuity, and lineality had overlaid the complexities of ancient feudal and oral society. The revolution was carried out by the new literati and lawyers.

In England, however, such was the power of the ancient oral traditions of common law, backed by the medieval institution of Parliament, that no uniformity or continuity of the new visual print culture could take complete hold. The result was that the most important event in English history has never taken place; namely, the English Revolution on the lines of the French Revolution. The American Revolution had no medieval legal institutions to discard or to root out, apart from monarchy. And many have held that the American presidency has become very much more personal and monarchical than any European monarch ever could be.

De Tocqueville's contrast between England and America is

clearly based on the fact of typography and of print culture creating uniformity and continuity. England, he says, has rejected this principle and clung to the dynamic or oral common law tradition. Hence the discontinuity and unpredictable quality of English culture. The grammar of print cannot help to construe the message of oral and nonwritten culture and institutions. The English aristocracy was properly classified as barbarian by Matthew Arnold because its power and status had nothing to do with literacy or with the cultural forms of typography. Said the Duke of Gloucester to Edward Gibbon upon the publication of his *Decline and Fall*: "Another damned fat book, eh, Mr. Gibbon? Scribble, scribble, scribble, eh, Mr. Gibbon?" De Tocqueville was a highly literate aristocrat who was quite able to be detached from the values and assumptions of typography. That is why he alone understood the grammar of typography. And it is only on those terms, standing aside from any structure or medium, that its principles and lines of force can be discerned. For any medium has the power of imposing its own assumption on the unwary. Prediction and control consist in avoiding this subliminal state of Narcissus trance. But the greatest aid to this end is simply in knowing that the spell can occur immediately upon contact, as in the first bars of a melody.

A Passage to India by E. M. Forster is a dramatic study of the inability of oral and intuitive Oriental culture to meet with the rational, visual European patterns of experience. "Rational," of course, has for the West long meant "uniform and continuous and sequential." In other words, we have confused reason with literacy, and rationalism with a single technology. Thus in the electric age man seems to the conventional West to become irrational. In Forster's novel the moment of truth and dislocation from the typographic trance of the West comes in the Marabar Caves. Adela Quested's reasoning powers cannot cope with the total inclusive field of resonance that is India. After the caves: "Life went on as usual, but had no consequences, that is to say, sounds did not echo nor thought develop. Everything seemed cut off at its root and therefore infected with illusion."

A Passage to India (the phrase is from Whitman, who saw America headed Eastward) is a parable of Western man in the electric age, and is only incidentally related to Europe or the Orient. The ultimate conflict between sight and sound, between written and oral kinds of perception and organization of existence, is upon us. Since understanding stops action, as Nietzsche observed, we can moderate the fierceness of this conflict by understanding the media that extend us and raise these wars within and without us.

Detribalization by literacy and its traumatic effects on tribal man are the themes of a book by the psychiatrist J. C. Carothers, *The African Mind in Health and Disease*.¹ Much of his material appeared in an article, "The Culture, Psychiatry, and the Written Word."² Again, it is electric speed that has revealed the lines of force operating from Western technology in the remotest areas of bush, savanna, and desert. One example is the Bedouin with his battery radio on board the camel. Submerging natives with floods of concepts for which nothing has prepared them is the normal action of all of our technology. But with electric media Western man himself experiences exactly the same inundation as the remote native. We are no more prepared to encounter radio and TV in our literate milieu than the native of Ghana is able to cope with the literacy that takes him out of his collective tribal world and beaches him in individual isolation. We are as numb in our new electric world as the native involved in our literate and mechanical culture.

Electric speed mingles the cultures of prehistory with the dregs of industrial marketeers, the nonliterate with the semiliterate and the postliterate. Mental breakdown of varying degrees is the very common result of uprooting and inundation with new information and endless new patterns of information. Wyndham Lewis made this a theme of his group of novels called *The Human Age*. The first of these, *The Childermass*, is

¹ J. C. Carothers, *The African Mind in Health and Disease* (Geneva: World Health Organization, 1953).

² J. C. Carothers, "The Culture, Psychiatry, and the Written Word," *Psychiatry*, November, 1959.

concerned precisely with accelerated media change as a kind of massacre of the innocents. In our own world, as we become more aware of the effects of technology on psychic formation and manifestation, we are losing all confidence in our right to assign guilt. Ancient prehistoric societies regard violent crime as pathetic. The killer is regarded as we do a cancer victim. "How terrible it must be to feel like that," they say. J. M. Synge took up this idea very effectively in his *Playboy of the Western World*.

If the criminal appears as a nonconformist who is unable to meet the demand of technology that we behave in uniform and continuous patterns, literate man is quite inclined to see others who cannot conform as somewhat pathetic. Especially the child, the cripple, the woman, and the colored person appear in a world of visual and typographic technology as victims of injustice. On the other hand, in a culture that assigns roles instead of jobs to people—the dwarf, the skew, the child create their own spaces. They are not expected to fit into some uniform and repeatable niche that is not their size anyway. Consider the phrase, "It's a man's world." As a quantitative observation endlessly repeated from within a homogenized culture, this phrase refers to the men in such a culture who have to be homogenized Dagwoods in order to belong at all. It is in our I.Q. testing that we have produced the greatest flood of misbegotten standards. Unaware of our typographic cultural bias, our testers assume that uniform and continuous habits are a sign of intelligence, thus eliminating the ear man and the tactile man.

C. P. Snow, reviewing a book of A. L. Rowse on appeasement and the road to Munich,³ describes the top level of British brains and experience in the 1930's. "Their I.Q.'s were much higher than usual among political bosses. Why were they such a disaster?" The view of Rowse, Snow approves: "They would not listen to warnings because they did not wish to hear." Being anti-Red made it impossible for them to read the message of Hitler. But their failure was as nothing compared to our present one. The American stake in literacy as a technol-

³ See *The New York Times Book Review*, December 24, 1961.

ogy or uniformity applied to every level of education, government, industry, and social life is totally threatened by the electric technology. The threat of Stalin or Hitler was external. The electric technology is within the gates, and we are numb, deaf, blind, and mute about its encounter with the Gutenberg technology, on and through which the American way of life was formed. It is, however, no time to suggest strategies when the threat has not even been acknowledged to exist. I am in the position of Louis Pasteur telling doctors that their greatest enemy was quite invisible, and quite unrecognized by them. Our conventional response to all media, namely that it is how they are used that counts, is the numb stance of the technological idiot. For the "content" of a medium is like the juicy piece of meat carried by the burglar to distract the watchdog of the mind. The effect of the medium is made strong and intense just because it is given another medium as "content." The content of a movie is a novel or a play or an opera. The effect of the movie form is not related to its program content. The "content" of writing or print is speech, but the reader is almost entirely unaware either of print or of speech.

Arnold Toynbee is innocent of any understanding of media as they have shaped history, but he is full of examples that the student of media can use. At one moment he can seriously suggest that adult education, such as the Workers Educational Association in Britain, is a useful counterforce to the popular press. Toynbee considers that although all of the Oriental societies have in our time accepted the industrial technology and its political consequences, "On the cultural plane, however, there is no uniform corresponding tendency."⁴ This is like the voice of the literate man, floundering in a milieu of ads, who boasts, "Personally, I pay no attention to ads." The spiritual and cultural reservations that the Oriental peoples may have toward our technology will avail them not at all. The effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perception steadily and without any resistance. The serious artist is the only person

⁴ Arnold J. Toynbee, *A Study of History*, ed. D. C. Somervell (New York: Oxford University Press, 1947), vol. 1, p. 267.

able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception.

The operation of the money medium in seventeenth-century Japan had effects not unlike the operation of typography in the West. The penetration of the money economy, wrote G. B. Sansom, "caused a slow but irresistible revolution, culminating in the breakdown of feudal government and the resumption of intercourse with foreign countries after more than two hundred years of seclusion."⁵ Money has reorganized the sense life of peoples just because it is an *extension* or our sense lives. This change does not depend upon approval or disapproval of those living in the society.

Arnold Toynbee made one approach to the transforming power of media in his concept of "etherialization," which he holds to be the principle of progressive simplification and efficiency in any organization or technology. Typically, he is ignoring the *effect* of the challenge of these forms upon the response of our senses. He imagines that it is the response of our opinions that is relevant to the effect of media and technology in society, a "point of view" that is plainly the result of the typographic spell. For the man in a literate and homogenized society ceases to be sensitive to the diverse and discontinuous life of forms. He acquires the illusion of the third dimension and the "private point of view" as part of his Narcissus fixation, and is quite shut off from Blake's awareness or that of the Psalmist, that we become what we behold.

Today when we want to get our bearings in our own culture, and have need to stand aside from the bias and pressure exerted by any technical form of human expression, we have only to visit a society where that particular form has not been felt, or a historical period in which it was unknown. Wilbur Schramm made such a tactical move in studying *Television in the Lives of Our Children*. He found areas where TV had not penetrated at all and ran some tests. Since he had made no study of the peculiar nature of the TV image, his tests were of "content" preferences, viewing time, and vocabulary counts. In

⁵ G. B. Sansom, *Japan* (London: Cresset Press, 1931).

a word, his approach to the problem was a literary one, albeit unconsciously so. Consequently, he had nothing to report. Had his methods been employed in 1500 A.D. to discover the effects of the printed book in the lives of children or adults, he could have found out nothing of the changes in human and social psychology resulting from typography. Print created individualism and nationalism in the sixteenth century. Program and "content" analysis offer no clues to the magic of these media or to their subliminal charge.

Leonard Doob, in his report *Communication in Africa*, tells of one African who took great pains to listen each evening to the BBC news, even though he could understand nothing of it. Just to be in the presence of those sounds at 7 P.M. each day was important for him. His attitude to speech was like ours to melody—the resonant intonation was meaning enough. In the seventeenth century our ancestors still shared this native's attitude to the forms of media, as is plain in the following sentiment of the Frenchman Bernard Lam expressed in *The Art of Speaking*: "Tis an effect of the Wisdom of God, who created Man to be happy, that whatever is useful to his conversation (way of life) is agreeable to him . . . because all victual that conduces to nourishment is relishable, whereas other things that cannot be assimilated and be turned into our substance are insipid. A Discourse cannot be pleasant to the Hearer that is not easie to the Speaker; nor can it be easily pronounced unless it be heard with delight."⁶ Here is an equilibrium theory of human diet and expression such as even now we are only striving to work out again for media after centuries of fragmentation and specialism.

Pope Pius XII was deeply concerned that there be serious study of the media today. On February 17, 1950, he said: "It is not an exaggeration to say that the future of modern society and the stability of its inner life depend in large part on the maintenance of an equilibrium between the strength of the techniques of communication and the capacity of the individual's own reaction."

⁶ Bernard Lam, *The Art of Speaking* (London, 1696).

Failure in this respect has for centuries been typical and total for mankind. Subliminal and docile acceptance of media impact has made them prisons without walls for their human users. As A. J. Liebling remarked in his book, *The Press*, a man is not free if he cannot see where he is going, even if he has a gun to help him get there. For each of the media is also a powerful weapon with which to clobber other media and other groups. The result is that the present age has been one of multiple civil wars that are not limited to the world of art and entertainment. In *War and Human Progress*, Professor J. U. Nef declared: "The total wars of our time have been the result of a series of intellectual mistakes."

If the formative power in the media are the media themselves, that raises a host of large matters that can only be mentioned here, although they deserve volumes. Namely, that technological media are staples or natural resources, exactly as are coal and cotton and oil. Anybody will concede that society whose economy is dependent upon one or two major staples like cotton, or grain, or lumber, or fish, or cattle is going to have some obvious social patterns of organization as a result. Stress on a few major staples creates extreme instability in the economy but great endurance in the population. The pathos and humor of the American South are embedded in such an economy of limited staples. For a society configured by reliance on a few commodities accepts them as a social bond quite as much as the metropolis does the press. Cotton and oil, like radio and TV, become "fixed charges" on the entire psychic life of the community. And this pervasive fact creates the unique cultural flavor of any society. It pays through the nose and all its other senses for each staple that shapes its life.

That our human senses, of which all media are extensions, are also fixed charges on our personal energies, and that they also configure the awareness and experience of each one of us, may be perceived in another connection mentioned by the psychologist C. G. Jung: "Every Roman was surrounded by slaves. The slave and his psychology flooded ancient Italy, and every Roman became inwardly, and of course unwittingly, a slave.

Because living constantly in the atmosphere of slaves, he became infected through the unconscious with their psychology. No one can shield himself from such an influence."⁷

⁷ C. G. Jung, *Contributions to Analytical Psychology* (London, 1928).

DANIEL J. BOORSTIN

*From News-Gathering to News-Making:
A Flood of Pseudo-Events*

Whether or not "the medium is the message," Boorstin is concerned with the message that comes from media content. In this case, he focuses on the propensity of the news media to create events. There aren't enough great events in the world to fill the newspapers and the news broadcasts; therefore, reporters and news directors must go out and create situations that "make a reader say, 'Gee Whiz!'" Boorstin cites and analyzes many examples of this technique. It is not being imposed on us, he emphasizes; we demand excitement in the news, and we accept illusion and fantasy. Thus we are not being fooled, but we aren't being informed either. The result, he suggests, is a kind of Gresham's law, by which counterfeit happenings tend to drive spontaneous happenings out of circulation.

This is a chapter from the provocative and widely read book, *The Image: A Guide to Pseudo-Events in America* by Daniel J. Boorstin. Copyright 1961 by Daniel J. Boorstin. Reprinted by permission of the author and of Atheneum Publishers. Available in the Harper Colophon paperback edition.

ADMIRING FRIEND:

"My, that's a beautiful baby you have there!"

MOTHER:

"Oh, that's nothing—you should see his photograph!"

THE SIMPLEST of our extravagant expectations concerns the amount of novelty in the world. There was a time when the reader of an unexciting newspaper would remark, "How dull is the world today!" Nowadays he says, "What a dull newspaper!" When the first American newspaper, Benjamin Harris's *Publick Occurrences Both Forreign and Domestick*, appeared in Boston on September 25, 1690, it promised to furnish news regularly once a month. But, the editor explained, it might appear oftener "if any Glut of Occurrences happen." The responsibility for making news was entirely God's—or the Devil's. The newsman's task was only to give "an Account of such considerable things as have arrived unto our Notice."

Although the theology behind this way of looking at events soon dissolved, this view of the news lasted longer. "The skilled and faithful journalist," James Parton observed in 1866, "recording with exactness and power the thing that has come to pass, is Providence addressing men." The story is told of a Southern Baptist clergyman before the Civil War who used to say, when a newspaper was brought in the room, "Be kind enough to let me have it a few minutes, till I see how the Supreme Being is governing the world." Charles A. Dana, one of the great American editors of the nineteenth century, once defended his extensive reporting of crime in the *New York Sun* by saying, "I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report."

Of course, this is now a very old-fashioned way of thinking. Our current point of view is better expressed in the definition by Arthur MacEwen, whom William Randolph Hearst made his first editor of the *San Francisco Examiner*: "News is anything that makes a reader say, 'Gee whiz!'" Or, put more soberly, "News is whatever a good editor chooses to print."

We need not be theologians to see that we have shifted responsibility for making the world interesting from God to the newspaperman. We used to believe there were only so many "events" in the world. If there were not many intriguing or startling occurrences, it was no fault of the reporter. He could not be expected to report what did not exist.

Within the last hundred years, however, and especially in the twentieth century, all this has changed. We expect the papers to be full of news. If there is no news visible to the naked eye, or to the average citizen, we still expect it to be there for the enterprising newsman. The successful reporter is one who can find a story, even if there is no earthquake or assassination or civil war. If he cannot find a story, then he must make one—by the questions he asks of public figures, by the surprising human interest he unfolds from some commonplace event, or by "the news behind the news." If all this fails, then he must give us a "think piece"—an embroidering of well-known facts, or a speculation about startling things to come.

This change in our attitude toward "news" is not merely a

basic fact about the history of American newspapers. It is a symptom of a revolutionary change in our attitude toward what happens in the world, how much of it is new, and surprising, and important. Toward how life can be enlivened, toward our power and the power of those who inform and educate and guide us, to provide synthetic happenings to make up for the lack of spontaneous events. Demanding more than the world can give us, we require that something be fabricated to make up for the world's deficiency. This is only one example of our demand for illusions.

Many historical forces help explain how we have come to our present immoderate hopes. But there can be no doubt about what we now expect, nor that it is immoderate. Every American knows the anticipation with which he picks up his morning newspaper at breakfast or opens his evening paper before dinner, or listens to the newscasts every hour on the hour as he drives across country, or watches his favorite commentator on television interpret the events of the day. Many enterprising Americans are now at work to help us satisfy these expectations. Many might be put out of work if we should suddenly moderate our expectations. But it is we who keep them in business and demand that they fill our consciousness with novelties, that they play God for us.

I

The new kind of synthetic novelty which has flooded our experience I will call "pseudo-events." The common prefix "pseudo" comes from the Greek word meaning false, or intended to deceive. Before I recall the historical forces which have made these pseudo-events possible, have increased the supply of them and the demand for them, I will give a commonplace example.

The owners of a hotel, in an illustration offered by Edward L. Bernays in his pioneer *Crystallizing Public Opinion*, consult a public relations counsel. They ask how to increase their hotel's prestige and so improve their business. In less sophisticated times, the answer might have been to hire a new chef, to

improve the plumbing, to paint the rooms, or to install a crystal chandelier in the lobby. The public relations counsel's technique is more indirect. He proposes that the management stage a celebration of the hotel's thirtieth anniversary. A committee is formed, including a prominent banker, a leading society matron, a well-known lawyer, an influential preacher, and an "event" is planned (say a banquet) to call attention to the distinguished service the hotel has been rendering the community. The celebration is held, photographs are taken, the occasion is widely reported, and the object is accomplished. Now this occasion is a pseudo-event, and will illustrate all the essential features of pseudo-events.

This celebration, we can see at the outset, is somewhat—but not entirely—misleading. Presumably the public relations counsel would not have been able to form his committee of prominent citizens if the hotel had not actually been rendering service to the community. On the other hand, if the hotel's services had been all that important, instigation by public relations counsel might not have been necessary. Once the celebration has been held, the celebration itself becomes evidence that the hotel really is a distinguished institution. The occasion actually gives the hotel the prestige to which it is pretending.

It is obvious, too, that the value of such a celebration to the owners depends on its being photographed and reported in newspapers, magazines, newsreels, on radio, and over television. It is the report that gives the event its force in the minds of potential customers. The power to make a reportable event is thus the power to make experience. One is reminded of Napoleon's apocryphal reply to his general, who objected that circumstances were unfavorable to a proposed campaign: "Bah, I make circumstances!" The modern public relations counsel—and he is, of course, only one of many twentieth-century creators of pseudo-events—has come close to fulfilling Napoleon's idle boast. "The counsel on public relations," Mr. Bernays explains, "not only knows what news value is, but knowing it, he is in a position to *make news happen*. He is a creator of events."

The intriguing feature of the modern situation, however,

comes precisely from the fact that the modern news-makers are not God. The news they make happen, the events they create, are somehow not quite real. There remains a tantalizing difference between man-made and God-made events.

A pseudo-event, then, is a happening that possesses the following characteristics. (1) It is not spontaneous, but comes about because someone has planned, planted, or incited it. Typically, it is not a train wreck or an earthquake, but an interview. (2) It is planted primarily (not always exclusively) for the immediate purpose of being reported or reproduced. Therefore, its occurrence is arranged for the convenience of the reporting or reproducing media. Its success is measured by how widely it is reported. Time relations in it are commonly fictitious or factitious; the announcement is given out in advance "for future release" and written as if the event had occurred in the past. The question, "Is it real?" is less important than, "Is it newsworthy?" (3) Its relation to the underlying reality of the situation is ambiguous. Its interest arises largely from this very ambiguity. Concerning a pseudo-event the question, "What does it mean?" has a new dimension. While the news interest in a train wreck is in *what* happened and in the real consequences, the interest in an interview is always, in a sense, in *whether* it really happened and in what might have been the motives. Did the statement really mean what it said? Without some of this ambiguity a pseudo-event cannot be very interesting. (4) Usually it is intended to be a self-fulfilling prophecy. The hotel's thirtieth-anniversary celebration, by saying that the hotel is a distinguished institution, actually makes it one.

II

In the last half century a larger and larger proportion of our experience, of what we read and see and hear, has come to consist of pseudo-events. We expect more of them and we are given more of them. They flood our consciousness. Their multiplication has gone on in the United States at a faster rate than elsewhere. Even the rate of increase is increasing every day. This is true of the world of education, of consumption, and of

personal relations. It is especially true of the world of public affairs which I describe in this chapter.

A full explanation of the origin and rise of pseudo-events would be nothing less than a history of modern America. For our present purposes it is enough to recall a few of the more revolutionary recent developments.

The great modern increase in the supply and the demand for news began in the early nineteenth century. Until then newspapers tended to fill out their columns with lackadaisical secondhand accounts or stale reprints of items first published elsewhere at home and abroad. The laws of plagiarism and of copyright were undeveloped. Most newspapers were little more than excuses for espousing a political position, for listing the arrival and departure of ships, for familiar essays and useful advice, or for commercial or legal announcements.

Less than a century and a half ago did newspapers begin to disseminate up-to-date reports of matters of public interest written by eyewitnesses or professional reporters near the scene. The telegraph was perfected and applied to news reporting in the 1830's and 1840's. Two newspapermen, William M. Swain of the *Philadelphia Public Ledger* and Amos Kendall of Frankfort, Kentucky, were founders of the national telegraphic network. Polk's presidential message in 1846 was the first to be transmitted by wire. When the Associated Press was founded in 1848, news began to be a salable commodity. Then appeared the rotary press, which could print on a continuous sheet and on both sides of the paper at the same time. The *New York Tribune's* high-speed press, installed in the 1870's, could turn out 18,000 papers per hour. The Civil War, and later the Spanish-American War, offered raw materials and incentive for vivid up-to-the-minute, on-the-spot reporting. The competitive daring of giants like James Gordon Bennett, Joseph Pulitzer, and William Randolph Hearst intensified the race for news and widened newspaper circulation.

These events were part of a great, but little-noticed, revolution—what I would call the Graphic Revolution. Man's ability to make, preserve, transmit, and disseminate precise images—images of print, of men and landscapes and events, of

the voices of men and mobs—now grew at a fantastic pace. The increased speed of printing was itself revolutionary. Still more revolutionary were the new techniques for making direct images of nature. Photography was destined soon to give printed matter itself a secondary role. By a giant leap Americans crossed the gulf from the daguerreotype to color television in less than a century. Dry-plate photography came in 1873; Bell patented the telephone in 1876; the phonograph was invented in 1877; the roll film appeared in 1884; Eastman's Kodak No. 1 was produced in 1888; Edison's patent on the radio came in 1891; motion pictures came in and voice was first transmitted by radio around 1900; the first national political convention widely broadcast by radio was that of 1928; television became commercially important in 1941, and color television even more recently.

Verisimilitude took on a new meaning. Not only was it now possible to give the actual voice and gestures of Franklin Delano Roosevelt unprecedented reality and intimacy for a whole nation. Vivid image came to overshadow pale reality. Sound motion pictures in color led a whole generation of pioneering American movie-goers to think of Benjamin Disraeli as an earlier imitation of George Arliss, just as television has led a later generation of television watchers to see the western cowboy as an inferior replica of John Wayne. The Grand Canyon itself became a disappointing reproduction of the Kodachrome original.

The new power to report and portray what had happened was a new temptation leading newsmen to make probable images or to prepare reports in advance of what was expected to happen. As so often, men came to mistake their power for their necessities. Readers and viewers would soon prefer the vividness of the account, the "candidness" of the photograph, to the spontaneity of what was recounted.

Then came round-the-clock media. The news gap soon became so narrow that in order to have additional "news" for each new edition or each new broadcast it was necessary to plan in advance the stages by which any available news would be

unveiled. After the weekly and the daily came the "extras" and the numerous regular editions. The *Philadelphia Evening Bulletin* soon had seven editions a day. No rest for the newsman. With more space to fill, he had to fill it ever more quickly. In order to justify the numerous editions, it was increasingly necessary that the news constantly change or at least seem to change. With radio on the air continuously during waking hours, the reporters' problems became still more acute. News every hour on the hour, and sometimes on the half hour. Programs interrupted any time for special bulletins. How to avoid deadly repetition, the appearance that nothing was happening, that news-gatherers were asleep, or that competitors were more alert? As the costs of printing and then of broadcasting increased, it became financially necessary to keep the presses always at work and the TV screen always busy. Pressures toward the making of pseudo-events became ever stronger. News-gathering turned into news-making.

The "interview" was a novel way of making news which had come in with the Graphic Revolution. Later it became elaborated into lengthy radio and television panels and quizzes of public figures, and the three-hour-long, rambling conversation programs. Although the interview technique might seem an obvious one—and in a primitive form was as old as Socrates—the use of the word in its modern journalistic sense is a relatively recent Americanism. The *Boston News-Letter's* account (March 2, 1719) of the death of Blackbeard the Pirate had apparently been based on a kind of interview with a ship captain. One of the earliest interviews of the modern type—some writers call it the first—was by James Gordon Bennett, the flamboyant editor of the *New York Herald* (April 16, 1836), in connection with the Robinson-Jewett murder case. Ellen Jewett, inmate of a house of prostitution, had been found murdered by an ax. Richard P. Robinson, a young man about town, was accused of the crime. Bennett seized the occasion to pyramid sensational stories and so to build circulation for his *Herald*; before long he was having difficulty turning out enough copies daily to satisfy the demand. He exploited the story in every possible

way, one of which was to plan and report an actual interview with Rosina Townsend, the madam who kept the house and whom he visited on her own premises.

Historians of journalism date the first full-fledged modern interview with a well-known public figure from July 13, 1859, when Horace Greeley interviewed Brigham Young in Salt Lake City, asking him questions on many matters of public interest, and then publishing the answers verbatim in his *New York Tribune* (August 20, 1859). The common use of the word "interview" in this modern American sense first came in about this time. Very early the institution acquired a reputation for being contrived. "The 'interview,'" *The Nation* complained (January 28, 1869), "as at present managed, is generally the joint product of some humbug of a hack politician and another humbug of a reporter." A few years later another magazine editor called the interview "the most perfect contrivance yet devised to make journalism an offence, a thing of ill savor in all decent nostrils." Many objected to the practice as an invasion of privacy. After the American example it was used in England and France, but in both those countries it made much slower headway.

Even before the invention of the interview, the news-making profession in America had attained a new dignity as well as a menacing power. It was in 1828 that Macaulay called the gallery where reporters sat in Parliament a "fourth estate of the realm." But Macaulay could not have imagined the prestige of journalists in the twentieth-century United States. They have long since made themselves the tribunes of the people. Their supposed detachment and lack of partisanship, their closeness to the sources of information, their articulateness, and their constant and direct access to the whole citizenry have made them also the counselors of the people. Foreign observers are now astonished by the almost constitutional—perhaps we should say supraconstitutional—powers of our Washington press corps.

Since the rise of the modern presidential press conference, about 1933, capital correspondents have had the power regu-

larly to question the president face-to-face, to embarrass him, to needle him, to force him into positions or into public refusal to take a position. A president may find it inconvenient to meet a group of dissident senators or congressmen; he seldom dares refuse the press. That refusal itself becomes news. It is only very recently, and as a result of increasing pressures by newsmen, that the phrase "No comment" has become a way of saying something important. The reputation of newsmen—who now of course include those working for radio, TV, and magazines—depends on their ability to ask hard questions, to put politicians on the spot; their very livelihood depends on the willing collaboration of public figures. Even before 1950 Washington had about 1,500 correspondents and about 3,000 government information officials prepared to serve them.

Not only the regular formal press conferences, but a score of other national programs—such as "Meet the Press" and "Face the Nation"—show the power of newsmen. In 1960 David Susskind's late-night conversation show, "Open End," commanded the presence of the Russian premier for three hours. During the so-called "Great Debates" that year between the candidates in the presidential campaign, it was newsmen who called the tune.

The live television broadcasting of the president's regular news conferences, which President Kennedy began in 1961, immediately after taking office, has somewhat changed their character. Newsmen are no longer so important as intermediaries who relay the president's statements. But the new occasion acquires a new interest as a dramatic performance. Citizens who from homes or offices have seen the president at his news conference are then even more interested to hear competing interpretations by skilled commentators. News commentators can add a new appeal as dramatic critics to their traditional role as interpreters of current history. Even in the new format it is still the newsmen who put the questions. They are still tribunes of the people.

III

The British constitution, shaped as it is from materials accumulated since the Middle Ages, functions, we have often been told, only because the British people are willing to live with a great number of legal fictions. The monarchy is only the most prominent. We Americans have accommodated our eighteenth-century constitution to twentieth-century technology by multiplying pseudo-events and by developing professions which both help make pseudo-events and help us interpret them. The disproportion between what an informed citizen needs to know and what he can know is ever greater. The disproportion grows with the increase of the officials' powers of concealment and contrivance. The news gatherers' need to select, invent, and plan correspondingly increases. Thus inevitably our whole system of public information produces always more "packaged" news, more pseudo-events.

A trivial but prophetic example of the American penchant for pseudo-events has long been found in our *Congressional Record*. The British and French counterparts, surprisingly enough, give a faithful report of what is said on the floor of their deliberative bodies. But ever since the establishment of the *Congressional Record* under its present title in 1873, our only ostensibly complete report of what goes on in Congress has had no more than the faintest resemblance to what is actually said there. Despite occasional feeble protests, our *Record* has remained a gargantuan miscellany in which actual proceedings are buried beneath undelivered speeches, and mountains of the unread and the unreadable. Only a national humorlessness—or sense of humor—can account for our willingness to tolerate this. Perhaps it also explains why, as a frustrated reformer of the *Record* argued on the floor of the Senate in 1884, "the American public have generally come to regard the proceedings of Congress as a sort of variety performance, where nothing is supposed to be real except the pay."

The common "news releases" which every day issue by the ream from congressmen's offices, from the president's press sec-

retary, from the press relations offices of businesses, charitable organizations, and universities are a kind of *Congressional Record* covering all American life. And they are only a slightly less inaccurate record of spontaneous happenings. To secure "news coverage" for an event (especially if it has little news interest) one must issue, in proper form, a "release." The very expression "news release" (apparently an American invention; it was first recorded in 1907) did not come into common use until recently. There is an appropriate perversity in calling it a "release." It might more accurately be described as a "news holdback," since its purpose is to offer something that is to be held back from publication until a specified future date. The newspaperman's slightly derogatory slang term for the news release is "handout," from the phrase originally used for a bundle of stale food handed out from a house to a beggar. Though this meaning of the word is now in common use in the news-gathering professions, it is so recent that it has not yet made its way into our dictionaries.

The release is news precooked, and supposed to keep till needed. In the well-recognized format (usually mimeographed) it bears a date, say February 1, and also indicates, "For release to P.M.'s February 15." The account is written in the past tense but usually describes an event that has not yet happened when the release is given out. The use and interpretation of handouts have become an essential part of the newsman's job. The National Press Club in its Washington clubrooms has a large rack which is filled daily with the latest releases, so the reporter does not even have to visit the offices which give them out. In 1947 there were about twice as many government press agents engaged in preparing news releases as there were newsmen gathering them in.

The general public has become so accustomed to these procedures that a public official can sometimes "make news" merely by departing from the advance text given out in his release. When President Kennedy spoke in Chicago on the night of April 28, 1961, early editions of the next morning's newspapers (printed the night before for early-morning home delivery) merely reported his speech as it was given to newsmen in the

advance text. When the President abandoned the advance text, later editions of the *Chicago Sun-Times* headlined: "Kennedy Speaks Off Cuff. . . ." The article beneath emphasized that he had departed from his advance text and gave about equal space to his off-the-cuff speech and to the speech he never gave. Apparently the most newsworthy fact was that the President had not stuck to his prepared text.

We begin to be puzzled about what is really the "original" of an event. The authentic news record of what "happens" or is said comes increasingly to seem to be what is given out in advance. More and more news events become dramatic performances in which "men in the news" simply act out more or less well their prepared script. The story prepared "for future release" acquires an authenticity that competes with that of the actual occurrences on the scheduled date.

In recent years our successful politicians have been those most adept at using the press and other means to create pseudo-events. President Franklin Delano Roosevelt, whom Heywood Broun called "the best newspaperman who has ever been President of the United States," was the first modern master. While newspaper owners opposed him in editorials which few read, F.D.R. himself, with the collaboration of a friendly corps of Washington correspondents, was using front-page headlines to make news read by everybody. He was making "facts"—pseudo-events—while editorial writers were simply expressing opinions. It is a familiar story how he employed the trial balloon, how he exploited the ethic of off-the-record remarks, how he transformed the presidential press conference from a boring ritual into a major national institution which no later president dared disrespect, and how he developed the fireside chat. Knowing that newspapermen lived on news, he helped them manufacture it. And he knew enough about news-making techniques to help shape their stories to his own purposes.

Take, for example, these comments which President Roosevelt made at a press conference during his visit to a Civilian Conservation Corps camp in Florida on February 18, 1939, when war tensions were mounting:

I want to get something across, only don't put it that way. In other words, it is a thing that I cannot put as direct stuff, but it is background. And the way—as you know I very often do it—if I were writing the story, the way I'd write it is this—you know the formula: When asked when he was returning [to Washington], the President intimated that it was impossible to give any date; because, while he hoped to be away until the third or fourth of March, information that continues to be received with respect to the international situation continues to be disturbing, therefore, it may be necessary for the President to return [to the capital] before the third or fourth of March. It is understood that this information relates to the possible renewal of demands by certain countries, these demands being pushed, not through normal diplomatic channels but, rather, through the more recent type of relations; in other words, the use of fear of aggression.

F.D.R. was a man of great warmth, natural spontaneity, and simple eloquence, and his public utterances reached the citizen with a new intimacy. Yet, paradoxically, it was under his administrations that statements by the President attained a new subtlety and a new calculatedness. On his production team, in addition to newspapermen, there were poets, playwrights, and a regular corps of speech writers. Far from detracting from his effectiveness, this collaborative system for producing the impression of personal frankness and spontaneity provided an additional subject of newsworthy interest. Was it Robert Sherwood or Judge Samuel Rosenman who contributed this or that phrase? How much had the President revised the draft given him by his speech-writing team? Citizens became nearly as interested in how a particular speech was put together as in what it said. And when the President spoke, almost everyone knew it was a long-planned group production in which F.D.R. was only the star performer.

Of course President Roosevelt made many great decisions and lived in times which he only helped make stirring. But it is possible to build a political career almost entirely on pseudo-events. Such was that of the late Joseph R. McCarthy, sena-

tor from Wisconsin from 1947 to 1957. His career might have been impossible without the elaborate, perpetually grinding machinery of "information" which I have already described. And he was a natural genius at creating reportable happenings that had an interestingly ambiguous relation to underlying reality. Richard Rovere, a reporter in Washington during McCarthy's heyday, recalls:

He knew how to get into the news even on those rare occasions when invention failed him and he had no un-facts to give out. For example, he invented the morning press conference called for the purpose of announcing an afternoon press conference. The reporters would come in—they were beginning, in this period, to respond to his summonses like Pavlov's dogs at the clang of a bell—and McCarthy would say that he just wanted to give them the word that he expected to be ready with a shattering announcement later in the day, for use in the papers the following morning. This would gain him a headline in the afternoon papers: "New McCarthy Revelations Awaited in Capital." Afternoon would come, and if McCarthy had something, he would give it out, but often enough he had nothing, and this was a matter of slight concern. He would simply say that he wasn't quite ready, that he was having difficulty in getting some of the "documents" he needed or that a "witness" was proving elusive. Morning headlines: "Delay Seen in McCarthy Case—Mystery Witness Being Sought."

He had a diabolical fascination and an almost hypnotic power over news-hungry reporters. They were somehow reluctantly grateful to him for turning out their product. They stood astonished that he could make so much news from such meager raw material. Many hated him; all helped him. They were victims of what one of them called their "indiscriminate objectivity." In other words, McCarthy and the newsmen both thrived on the same synthetic commodity.

Senator McCarthy's political fortunes were promoted almost as much by newsmen who considered themselves his enemies as by those few who were his friends. Without the active help of all of them he could never have created the pseudo-events which brought him notoriety and power. Newspaper editors,

who self-righteously attacked the Senator's "collaborators," themselves proved worse than powerless to cut him down to size. Even while they attacked him on the editorial page inside, they were building him up in front-page headlines. Newspapermen were his most potent allies, for they were his co-manufacturers of pseudo-events. They were caught in their own web. Honest newsmen and the unscrupulous Senator McCarthy were in separate branches of the same business.

In the traditional vocabulary of newspapermen, there is a well-recognized distinction between "hard" and "soft" news. Hard news is supposed to be the solid report of significant matters: politics, economics, international relations, social welfare, science. Soft news reports popular interests, curiosities, and diversions: it includes sensational local reporting, scandalmongering, gossip columns, comic strips, the sexual lives of movie stars, and the latest murder. Journalists-critics attack American newspapers today for not being "serious" enough, for giving a larger and larger proportion of their space to soft rather than to hard news.

But the rising tide of pseudo-events washes away the distinction. Here is one example. On June 21, 1960, President Eisenhower was in Honolulu, en route to the Far East for a trip to meet the heads of government in Korea, the Philippines, and elsewhere. A seven-column headline in the *Chicago Daily News* brought readers the following information: "What Are Ike's Feelings about Trip? Aides Mum" "Doesn't Show Any Worry" "Members of Official Party Resent Queries by Newsmen." And the two-column story led off:

HONOLULU—President Eisenhower's reaction to his Far Eastern trip remains as closely guarded a secret as his golf score. While the President rests at Kaneohe Marine air station on the windward side of the Pali hills, hard by the blue Pacific and an 18-hole golf course, he might be toting up the pluses and minuses of his Asian sojourn. But there is no evidence of it. Members of his official party resent any inquiry into how the White House feels about the whole experience, especially the blowup of the Japanese visit which produced a critical storm.

The story concludes: "But sooner or later the realities will intrude. The likelihood is that it will be sooner than later."

Nowadays a successful reporter must be the midwife—or more often the conceiver—of his news. By the interview technique he incites a public figure to make statements which will sound like news. During the twentieth century this technique has grown into a devious apparatus which, in skillful hands, can shape national policy.

The pressure of time, and the need to produce a uniform news stream to fill the issuing media, induce Washington correspondents and others to use the interview and other techniques for making pseudo-events in novel, ever more ingenious and aggressive ways. One of the main facts of life for the wire service reporter in Washington is that there are many more afternoon than morning papers in the United States. The early afternoon paper on the East Coast goes to press about 10 A.M., before the spontaneous news of the day has had an opportunity to develop. "It means," one conscientious capital correspondent confides, in Douglass Cater's admirable *Fourth Branch of Government*, "the wire service reporter must engage in the basically phony operation of writing the 'overnight'—a story composed the previous evening but giving the impression when it appears the next afternoon that it covers that day's events."

What this can mean in a particular case is illustrated by the tribulations of a certain hard-working reporter who was trying to do his job and earn his keep at the time when the Austrian Treaty of 1955 came up for debate in the Senate. Although it was a matter of some national and international importance, the adoption of the treaty was a foregone conclusion; there would be little news in it. So, in order to make a story, this reporter went to Senator Walter George, chairman of the Senate Foreign Relations Committee, and extracted a statement to the effect that under the treaty Austria would receive no money or military aid, only long-term credits. "That became my lead," the reporter recalled. "I had fulfilled the necessary function of having a story that seemed to be part of the next day's news."

The next day, the treaty came up for debate. The debate was

dull, and it was hard to squeeze out a story. Luckily, however, Senator Jenner made a nasty crack about President Eisenhower, which the reporter (after considering what other wire service reporters covering the story might be doing) sent off as an "insert." The treaty was adopted by the Senate a little after 3:30 P.M. That automatically made a bulletin and required a new lead for the story on the debate. But by that time the hard-pressed reporter was faced with writing a completely new story for the next day's morning papers.

But my job had not finished. The Treaty adoption bulletin had gone out too late to get into most of the East Coast afternoon papers except the big city ones like the Philadelphia *Evening Bulletin*, which has seven editions. I had to find a new angle for an overnight to be carried next day by those P.M.'s which failed to carry the Treaty story.

They don't want to carry simply a day-old account of the debate. They want a "top" to the news. So, to put it quite bluntly, I went and got Senator Thye to say that Jenner by his actions was weakening the President's authority. Actually, the Thye charge was more lively news than the passage of the Austrian Treaty itself. It revealed conflict among the Senate Republicans. But the story had developed out of my need for a new peg for the news. It was not spontaneous on Thye's part. I had called seven other Senators before I could get someone to make a statement on Jenner. There is a fair criticism, I recognize, to be made of this practice. These Senators didn't call me. I called them. I, in a sense, generated the news. The reporter's imagination brought the Senator's thinking to bear on alternatives that he might not have thought of by himself.

This can be a very pervasive practice. One wire service reporter hounded Senator George daily on the foreign trade question until he finally got George to make the suggestion that Japan should trade with Red China as an alternative to dumping textiles on the American market. Then the reporter went straightway to Senator Knowland to get him to knock down the suggestion. It made a good story, and it also stimulated a minor policy debate that might not have got started otherwise. The "overnight" is the greatest single field for exploratory reporting for the wire services. It is what might be called "milking the news."

The reporter shrewdly adds that the task of his profession today is seldom to compose accounts of the latest events at lightning speed. Rather, it is shaped by "the problem of packaging." He says: "Our job is to report the news but it is also to keep a steady flow of news coming forward. Every Saturday morning, for example, we visit the Congressional leaders. We could write all the stories that we get out of these conferences for the Sunday A.M.'s but we don't. We learn to schedule them in order to space them out over Sunday's and Monday's papers."

An innocent observer might have expected that the rise of television and on-the-spot telecasting of the news would produce a pressure to report authentic spontaneous events exactly as they occur. But, ironically, these, like earlier improvements in the techniques of precise representation, have simply created more and better pseudo-events.

When General Douglas MacArthur returned to the United States (after President Truman relieved him of command in the Far East, on April 11, 1951, during the Korean War) he made a "triumphal" journey around the country. He was invited to help Chicago celebrate "MacArthur Day" (April 26, 1951), which had been proclaimed by resolution of the City Council. Elaborate ceremonies were arranged, including a parade. The proceedings were being televised.

A team of thirty-one University of Chicago sociologists, under the imaginative direction of Kurt Lang, took their posts at strategic points along the route of the MacArthur parade. The purpose was to note the reactions of the crowd and to compare what the spectators were seeing (or said they were seeing) with what they might have witnessed on television. This ingenious study confirmed my observation that we tend increasingly to fill our experience with contrived content. The newspapers had, of course, already prepared people for what the *Chicago Tribune* that morning predicted to be "a triumphant hero's welcome—biggest and warmest in the history of the middle west." Many of the actual spectators jammed in the crowd at the scene complained it was hard to see what was

going on; in some places they waited for hours and then were lucky to have a fleeting glimpse of the General.

But the television perspective was quite different. The video viewer had the advantage of numerous cameras which were widely dispersed. Television thus ordered the events in its own way, quite different from that of the on-the-spot confusion. The cameras were carefully focused on "significant" happenings—that is, those which emphasized the drama of the occasion. For the television watcher, the General was the continuous center of attraction from his appearance during the parade at 2:21 P.M. until the sudden blackout at 3:00 P.M. Announcers continually reiterated (the scripts showed over fifteen explicit references) the unprecedented drama of the event, or that this was "the greatest ovation this city has ever turned out." On the television screen one received the impression of wildly cheering and enthusiastic crowds before, during, and after the parade. Of course the cameras were specially selecting "action" shots, which showed a noisy, waving audience; yet in many cases the cheering, waving, and shouting were really a response not so much to the General as to the aiming of the camera. Actual spectators, with sore feet, suffered long periods of boredom. Many groups were apathetic. The video viewer, his eyes fixed alternately on the General and on an enthusiastic crowd, his ears filled with a breathless narrative emphasizing the interplay of crowd and celebrity, could not fail to receive an impression of continuous dramatic pageantry.

The most important single conclusion of these sociologists was that the television presentation (as contrasted with the actual witnessing) of the events "remained true to form until the very end, interpreting the entire proceedings according to expectations. . . . The telecast was made to conform to what was interpreted as the pattern of viewers' expectations." Actual spectators at the scene were doubly disappointed, not only because they usually saw very little (and that only briefly) from where they happened to be standing, but also because they knew they were missing a much better performance (with far more of the drama they expected) on the television screen. "I

bet my wife saw it much better over television!" and "We should have stayed home and watched it on TV" were the almost universal forms of dissatisfaction. While those at the scene were envying the viewers of the pseudo-event back home, the television viewers were, of course, being told again and again by the network commentators how great was the excitement of being "actually present."

Yet, as the Chicago sociologists noted, for many of those actually present one of the greatest thrills of the day was the opportunity to be on television. Just as everybody likes to see his name in the newspapers, so nearly everybody likes to think that he can be seen (or still better, with the aid of videotape, actually can see himself) on television. Similarly, reporters following candidates Kennedy and Nixon during their tours in the 1960 presidential campaign noted how many of the "supporters" in the large crowds that were being televised had come out because they wanted to be seen on the television cameras.

Television reporting allows us all to be the actors we really are. Recently I wandered onto the campus of the University of Chicago and happened to witness a tug of war between teams of students. It was amusing to see the women's team drench the men's team by pulling them into Botany Pond. Television cameras of the leading networks were there. The victory of the women's team seemed suspiciously easy to me. I was puzzled until told that this was not the original contest at all; the real tug of war had occurred a day or two before when telecasting conditions were not so good. This was a re-enactment for television.

On December 2, 1960, during the school integration disorders in New Orleans, Mayor de Lesseps S. Morrison wrote a letter to newsmen proposing a three-day moratorium on news and television coverage of the controversy. He argued that the printed and televised reports were exaggerated and were damaging the city's reputation and its tourist trade. People were given an impression of prevailing violence, when, he said, only one-tenth of 1 percent of the population had been involved in the demonstration. But he also pointed out that the mere presence of telecasting facilities was breeding disorder. "In many

cases," he observed, "these people go to the area to get themselves on television and hurry home for the afternoon and evening telecasts to see the show." At least two television reporters had gone about the crowd interviewing demonstrators with inflammatory questions like "Why are you opposed to intermarriage?" Mayor Morrison said he himself had witnessed a television cameraman "setting up a scene," and then, having persuaded a group of students to respond like a "cheering section," had them yell and demonstrate on cue. The conscientious reporters indignantly rejected the Mayor's proposed moratorium on news. They said that "freedom of the press" was at stake. That was once an institution preserved in the interest of the community. Now it is often a euphemism for the prerogative of reporters to produce their synthetic commodity.

IV

In many subtle ways, the rise of pseudo-events has mixed up our roles as actors and as audience—or, the philosophers would say, as "object" and as "subject." Now we can oscillate between the two roles. "The movies are the only business," Will Rogers once remarked, "where you can go out front and applaud yourself." Nowadays one need not be a professional actor to have this satisfaction. We can appear in the mob scene and then go home and see ourselves on the television screen. No wonder we became confused about what is spontaneous, about what is really going on out there!

New forms of pseudo-events, especially in the world of politics, thus offer a new kind of bewilderment to both politician and newsman. The politician (like F.D.R. in our example, or any holder of a press conference) himself in a sense composes the story; the journalist (like the wire service reporter we have quoted, or any newsman who incites an inflammatory statement) himself generates the event. The citizen can hardly be expected to assess the reality when the participants themselves are so often unsure who is doing the deed and who is making the report of it. Who is the history, and who is the historian?

An admirable example of this new intertwining of subject

and object, of the history and the historian, of the actor and the reporter, is the so-called news "leak." By now the leak has become an important and well-established institution in American politics. It is, in fact, one of the main vehicles for communicating important information from officials to the public.

A clue to the new unreality of the citizen's world is the perverse new meaning now given to the word "leak." To leak, according to the dictionary, is to "let a fluid substance out or in accidentally: as, the ship leaks." But nowadays a news leak is one of the most elaborately planned ways of emitting information. It is, of course, a way in which a government official, with some clearly defined purpose (a leak, even more than a direct announcement, is apt to have some definite devious purpose behind it) makes an announcement, asks a question, or puts a suggestion. It might more accurately be called a "*sub rosa* announcement," an "indirect statement," or "cloaked news."

The news leak is a pseudo-event par excellence. In its origin and growth, the leak illustrates another axiom of the world of pseudo-events: pseudo-events produce more pseudo-events. I will say more on this later.

With the elaboration of news-gathering facilities in Washington—of regular, planned press conferences, of prepared statements for future release, and of countless other practices—the news protocol has hardened. Both government officials and reporters have felt the need for more flexible and more ambiguous modes of communication between them. The presidential press conference itself actually began as a kind of leak. President Theodore Roosevelt for some time allowed Lincoln Steffens to interview him as he was being shaved. Other presidents gave favored correspondents an interview from time to time or dropped hints to friendly journalists. Similarly, the present institution of the news leak began in the irregular practice of a government official's helping a particular correspondent by confidentially giving him information not yet generally released. But today the leak is almost as well organized and as rigidly ruled by protocol as a formal press conference. Being fuller of ambiguity, with a welcome atmosphere of confidence and intrigue, it is more appealing to all concerned. The insti-

tutionalized leak puts a greater burden of contrivance and pretense on both government officials and reporters.

In Washington these days, and elsewhere on a smaller scale, the custom has grown up among important members of the government of arranging to dine with select representatives of the news corps. Such dinners are usually preceded by drinks, and beforehand there is a certain amount of restrained conviviality. Everyone knows the rules: the occasion is private, and any information given out afterwards must be communicated according to rule and in the technically proper vocabulary. After dinner the undersecretary, the general, or the admiral allows himself to be questioned. He may recount "facts" behind past news, state plans, or declare policy. The reporters have confidence, if not in the ingenuousness of the official, at least in their colleagues' respect of the protocol. Everybody understands the degree of attribution permissible for every statement made: what, if anything, can be directly quoted, what is "background," what is "deep background," what must be ascribed to "a spokesman," to "an informed source," to speculation, to rumor, or to remote possibility.

Such occasions and the reports flowing from them are loaded with ambiguity. The reporter himself often is not clear whether he is being told a simple fact, a newly settled policy, an administrative hope, or whether perhaps untruths are being deliberately diffused to allay public fears that the true facts are really true. The government official himself (who is sometimes no more than a spokesman) may not be clear. The reporter's task is to find a way of weaving these threads of unreality into a fabric that the reader will not recognize as entirely unreal. Some people have criticized the institutionalized leak as a form of domestic counterintelligence inappropriate in a republic. It has become more and more important and is the source today of many of the most influential reports of current politics.

One example will be enough. On March 26, 1955, the *New York Times* carried a three-column headline on the front page: "U.S. Expects Chinese Reds to Attack Isles in April; Weighs All-Out Defense." Three days later a contradictory headline in the same place read: "Eisenhower Sees No War Now Over

Chinese Isles." Under each of these headlines appeared a lengthy story. Neither story named any person as a source of the ostensible facts. The then-undisclosed story (months later recorded by Douglass Cater) was this. In the first instance, Admiral Robert B. Carney, Chief of Naval Operations, had an off-the-record "background" dinner for a few reporters. There the admiral gave reporters what they (and their readers) took to be facts. Since the story was "not for attribution," reporters were not free to mention some very relevant facts—such as that this was the opinion only of Admiral Carney, that this was the same Admiral Carney who had long been saying that war in Asia was inevitable, and that many in Washington (even in the Joint Chiefs of Staff) did not agree with him. Under the ground rules the first story could appear in the papers only by being given an impersonal authority, an atmosphere of official unanimity which it did not merit. The second, and contradictory, statement was in fact made not by the President himself, but by the President's press secretary, James Hagerty, who, having been alarmed by what he saw in the papers, quickly called a second "background" meeting to deny the stories that had sprouted from the first. What, if anything, did it all mean? Was there any real news here at all—except that there was disagreement between Admiral Carney and James Hagerty? Yet this was the fact newsmen were not free to print.

Pseudo-events spawn other pseudo-events in geometric progression. This is partly because every kind of pseudo-event (being planned) tends to become ritualized, with a protocol and a rigidity all its own. As each type of pseudo-event acquires this rigidity, pressures arise to produce other derivative forms of pseudo-event which are more fluid, more tantalizing, and more interestingly ambiguous. Thus, as the press conference (itself a pseudo-event) became formalized, there grew up the institutionalized leak. As the leak becomes formalized still other devices will appear. Of course the shrewd politician or the enterprising newsmen knows this and knows how to take advantage of it. Seldom for outright deception; more often simply to make more "news," to provide more "information," or to "improve communication."

For example, a background off-the-record press conference, if it is actually a mere trial balloon or a diplomatic device (as it sometimes was for Secretary of State John Foster Dulles), becomes the basis of official "denials" and "disavowals," of speculation and interpretation by columnists and commentators, and of special interviews on and off television with senators, representatives, and other public officials. Any statement or nonstatement by anyone in the public eye can become the basis of counterstatements or refusals to comment by others. All these compound the ambiguity of the occasion which first brought them into being.

Nowadays the test of a Washington reporter is seldom his skill at precise dramatic reporting, but more often his adeptness at dark intimation. If he wishes to keep his news channels open he must accumulate a vocabulary and develop a style to conceal his sources and obscure the relation of a supposed event or statement to the underlying facts of life, at the same time seeming to offer hard facts. Much of his stock in trade is his own and other people's speculation about the reality of what he reports. He lives in a penumbra between fact and fantasy. He helps create that very obscurity without which the supposed illumination of his reports would be unnecessary. A deft administrator these days must have similar skills. He must master "the technique of denying the truth without actually lying."

These pseudo-events which flood our consciousness must be distinguished from propaganda. The two do have some characteristics in common. But our peculiar problems come from the fact that pseudo-events are in some respects the opposite of the propaganda which rules totalitarian countries. Propaganda—as prescribed, say, by Hitler in *Mein Kampf*—is information intentionally biased. Its effect depends primarily on its emotional appeal. While a pseudo-event is an ambiguous truth, propaganda is an appealing falsehood. Pseudo-events thrive on our honest desire to be informed, to have "all the facts," and even to have more facts than there really are. But propaganda feeds on our willingness to be inflamed. Pseudo-events appeal to our duty to be educated, propaganda appeals to our desire to be

aroused. While propaganda substitutes opinion for facts, pseudo-events are synthetic facts which move people indirectly, by providing the "factual" basis on which they are supposed to make up their minds. Propaganda moves them directly by explicitly making judgments for them.

In a totalitarian society, where people are flooded by purposeful lies, the real facts are of course misrepresented, but the representation itself is not ambiguous. The propaganda lie is asserted as if it were true. Its object is to lead people to believe that the truth is simpler, more intelligible, than it really is. "Now the purpose of propaganda," Hitler explained, "is not continually to produce interesting changes for a few blasé little masters, but to convince; that means, to convince the masses. The masses, however, with their inertia, always need a certain time before they are ready even to notice a thing, and they will lend their memories only to the thousandfold repetition of the most simple ideas." But in our society, pseudo-events make simple facts seem more subtle, more ambiguous, and more speculative than they really are. Propaganda oversimplifies experience, pseudo-events overcomplicate it.

At first it may seem strange that the rise of pseudo-events has coincided with the growth of the professional ethic which obliges newsmen to omit editorializing and personal judgments from their news accounts. But now it is in the making of pseudo-events that newsmen find ample scope for their individuality and creative imagination.

In a democratic society like ours—and more especially in a highly literate, wealthy, competitive, and technologically advanced society—the people can be flooded by pseudo-events. For us, freedom of speech and of the press and of broadcasting includes freedom to create pseudo-events. Competing politicians, competing newsmen, and competing news media contest in this creation. They vie with one another in offering attractive, "informative" accounts and images of the world. They are free to speculate on the facts, to bring new facts into being, to demand answers to their own contrived questions. Our "free marketplace of ideas" is a place where people are confronted by competing pseudo-events and are allowed to judge among

them. When we speak of "informing" the people, this is what we really mean.

V

Until recently we have been justified in believing Abraham Lincoln's familiar maxim: "You may fool all the people some of the time; you can even fool some of the people all the time; but you can't fool all of the people all the time." This has been the foundation belief of American democracy. Lincoln's appealing slogan rests on two elementary assumptions. First, that there is a clear and visible distinction between sham and reality, between the lies a demagogue would have us believe and the truths which are there all the time. Second, that the people tend to prefer reality to sham, that if offered a choice between a simple truth and a contrived image, they will prefer the truth.

Neither of these any longer fits the facts. Not because people are less intelligent or more dishonest. Rather because great unforeseen changes—the great forward strides of American civilization—have blurred the edges of reality. The pseudo-events which flood our consciousness are neither true nor false in the old familiar senses. The very same advances which have made them possible have also made the images—however planned, contrived, or distorted—more vivid, more attractive, more impressive, and more persuasive than reality itself.

We cannot say that we are being fooled. It is not entirely inaccurate to say that we are being "informed." This world of ambiguity is created by those who believe they are instructing us, by our best public servants, and with our own collaboration. Our problem is the harder to solve because it is created by people working honestly and industriously at respectable jobs. It is not created by demagogues or crooks, by conspiracy or evil purpose. The efficient mass production of pseudo-events—in all kinds of packages, in black-and-white, in technicolor, in words, and in a thousand other forms—is the work of the whole machinery of our society. It is the daily product of men of good will. The media must be fed! The people must be in-

formed! Most pleas for "more information" are therefore misguided. So long as we define information as a knowledge of pseudo-events, "more information" will simply multiply the symptoms without curing the disease.

The American citizen thus lives in a world where fantasy is more real than reality, where the image has more dignity than its original. We hardly dare face our bewilderment, because our ambiguous experience is so pleasantly iridescent, and the solace of belief in contrived reality is so thoroughly real. We have become eager accessories to the great hoaxes of the age. These are the hoaxes we play on ourselves.

Pseudo-events from their very nature tend to be more interesting and more attractive than spontaneous events. Therefore in American public life today pseudo-events tend to drive all other kinds of events out of our consciousness, or at least to overshadow them. Earnest, well-informed citizens seldom notice that their experience of spontaneous events is buried by pseudo-events. Yet nowadays, the more industriously they work at "informing" themselves, the more this tends to be true.

In his now-classic work, *Public Opinion*, Walter Lippmann in 1922 began by distinguishing between "the world outside and the pictures in our heads." He defined a "stereotype" as an oversimplified pattern that helps us find meaning in the world. As examples he gave the crude "stereotypes we carry about in our heads," of large and varied classes of people like "Germans," "South Europeans," "Negroes," "Harvard men," "agitators," etc. The stereotype, Lippmann explained, satisfies our needs and helps us defend our prejudices by seeming to give definiteness and consistency to our turbulent and disorderly daily experience. In one sense, of course, stereotypes—the excessively simple, but easily grasped images of racial, national, or religious groups—are only another example of pseudo-events. But, generally speaking, they are closer to propaganda. For they simplify rather than complicate. Stereotypes narrow and limit experience in an emotionally satisfying way; but pseudo-events embroider and dramatize experience in an interesting way. This itself makes pseudo-events far more seductive; intellectually they are more defensible, more intricate, and

more intriguing. To discover how the stereotype is made—to unmask the sources of propaganda—is to make the stereotype less believable. Information about the staging of a pseudo-event simply adds to its fascination.

Lippmann's description of stereotypes was helpful in its day. But he wrote before pseudo-events had come in full flood. Photographic journalism was then still in its infancy. Wide World Photos had just been organized by the *New York Times* in 1919. The first wirephoto to attract wide attention was in 1924, when the American Telephone and Telegraph Company sent to the *New York Times* pictures of the Republican convention in Cleveland which nominated Calvin Coolidge. Associated Press Picture Service was established in 1928. *Life*, the first wide-circulating weekly picture news magazine, appeared in 1936; within a year it had a circulation of 1,000,000, and within two years, 2,000,000. *Look* followed, in 1937. The news-reel, originated in France by Pathé, had been introduced to the United States only in 1910. When Lippmann wrote his book in 1922, radio was not yet reporting news to the consumer; television was of course unknown.

Recent improvements in vividness and speed, the enlargement and multiplying of news-reporting media, and the public's increasing news hunger now make Lippmann's brilliant analysis of the stereotype the legacy of a simpler age. For stereotypes made experience handy to grasp. But pseudo-events would make experience newly and satisfyingly elusive. In 1911 Will Irwin, writing in *Collier's*, described the new era's growing public demand for news as "a crying primal want of the mind, like hunger of the body." The mania for news was a symptom of expectations enlarged far beyond the capacity of the natural world to satisfy. It required a synthetic product. It stirred an irrational and indiscriminating hunger for fancier, more varied items. Stereotypes there had been and always would be; but they only dulled the palate for information. They were an opiate. Pseudo-events whetted the appetite; they aroused news hunger in the very act of satisfying it.

In the age of pseudo-events it is less the artificial simplification than the artificial complication of experience that confuses

us. Whenever in the public mind a pseudo-event competes for attention with a spontaneous event in the same field, the pseudo-event will tend to dominate. What happens on television will overshadow what happens off television. Of course I am concerned here not with our private worlds but with our world of public affairs.

Here are some characteristics of pseudo-events which make them overshadow spontaneous events. (1) Pseudo-events are more dramatic. A television debate between candidates can be planned to be more suspenseful (for example, by reserving questions which are then popped suddenly) than a casual encounter or consecutive formal speeches planned by each separately. (2) Pseudo-events, being planned for dissemination, are easier to disseminate and to make vivid. Participants are selected for their newsworthy and dramatic interest. (3) Pseudo-events can be repeated at will, and thus their impression can be reinforced. (4) Pseudo-events cost money to create; hence somebody has an interest in disseminating, magnifying, advertising, and extolling them as events worth watching or worth believing. They are therefore advertised in advance and rerun in order to get money's worth. (5) Pseudo-events, being planned for intelligibility, are more intelligible and hence more reassuring. Even if we cannot discuss intelligently the qualifications of the candidates or the complicated issues, we can at least judge the effectiveness of a television performance. How comforting to have some political matter we can grasp! (6) Pseudo-events are more sociable, more conversable, and more convenient to witness. Their occurrence is planned for our convenience. The Sunday newspaper appears when we have a lazy morning for it. Television programs appear when we are ready with our glass of beer. In the office the next morning, Jack Paar's (or any other star performer's) regular late-night show at the usual hour will overshadow in conversation a casual event that suddenly came up and had to find its way into the news. (7) Knowledge of pseudo-events—of what has been reported, or what has been staged, and how—becomes the test of being "informed." News magazines provide us regularly with quiz questions concerning not what has happened but concerning

“names in the news”—what has been reported in the news magazines. Pseudo-events begin to provide that “common discourse” which some of my old-fashioned friends have hoped to find in the Great Books. (8) Finally, pseudo-events spawn other pseudo-events in geometric progression. They dominate our consciousness simply because there are more of them, and ever more.

By this new Gresham’s law of American public life, counterfeit happenings tend to drive spontaneous happenings out of circulation. The rise in the power and prestige of the presidency is due not only to the broadening powers of the office and the need for quick decisions, but also to the rise of centralized news-gathering and broadcasting, and the increase of the Washington press corps. The president has an ever more ready, more frequent, and more centralized access to the world of pseudo-events. A similar explanation helps account for the rising prominence in recent years of the congressional investigating committees. In many cases these committees have virtually no legislative impulse, and sometimes no intelligible legislative assignment. But they do have an almost unprecedented power, possessed now by no one else in the Federal government except the President, to make news. Newsmen support the committees because the committees feed the newsmen: they live together in happy symbiosis. The battle for power among Washington agencies becomes a contest to dominate the citizen’s information of the government. This can most easily be done by fabricating pseudo-events.

A perfect example of how pseudo-events can dominate is the recent popularity of the quiz show format. Its original appeal came less from the fact that such shows were tests of intelligence (or of dissimulation) than from the fact that the situations were elaborately contrived—with isolation booths, armed bank guards, and all the rest—and they purported to inform the public.

The application of the quiz show format to the so-called “Great Debates” between presidential candidates in the election of 1960 is only another example. These four campaign programs, pompously and self-righteously advertised by the

broadcasting networks, were remarkably successful in reducing great national issues to trivial dimensions. With appropriate vulgarity, they might have been called the \$400,000 Question (prize: a \$100,000-a-year job for four years). They were a clinical example of the pseudo-event, of how it is made, why it appeals, and of its consequences for democracy in America.

In origin the Great Debates were confusedly collaborative between politicians and news makers. Public interest centered around the pseudo-event itself: the lighting, make-up, ground rules, whether notes would be allowed, etc. Far more interest was shown in the performance than in what was said. The pseudo-events spawned in turn by the Great Debates were numberless. People who had seen the shows read about them the more avidly, and listened eagerly for interpretations by news commentators. Representatives of both parties made "statements" on the probable effects of the debates. Numerous interviews and discussion programs were broadcast exploring their meaning. Opinion polls kept us informed on the nuances of our own and other people's reactions. Topics of speculation multiplied. Even the question whether there should be a fifth debate became for a while a lively "issue."

The drama of the situation was mostly specious, or at least had an extremely ambiguous relevance to the main (but forgotten) issue: which participant was better qualified for the presidency. Of course, a man's ability, while standing under klieg lights, without notes, to answer in two and a half minutes a question kept secret until that moment, had only the most dubious relevance—if any at all—to his real qualifications to make deliberate presidential decisions on long-standing public questions after being instructed by a corps of advisers. The great presidents in our history (with the possible exception of F.D.R.) would have done miserably; but our most notorious demagogues would have shone. A number of exciting pseudo-events were created—for example, the Quemoy-Matsu issue. But that, too, was a good example of a pseudo-event: it was created to be reported, it concerned a then-quiet problem, and it put into the most factitious and trivial terms the great and real issue of our relation to Communist China.

The television medium shapes this new kind of political quiz-show spectacular in many crucial ways. Theodore H. White has proven this with copious detail in his *The Making of the President: 1960*. All the circumstances of this particular competition for votes were far more novel than the old word "debate" and the comparisons with the Lincoln-Douglas Debates suggested. Kennedy's great strength in the critical first debate, according to White, was that he was in fact not "debating" at all, but was seizing the opportunity to address the whole nation; while Nixon stuck close to the issues raised by his opponent, rebutting them one by one. Nixon, moreover, suffered a handicap that was serious only on television: he has a light, naturally transparent skin. On an ordinary camera that takes pictures by optical projection, this skin photographs well. But a television camera projects electronically, by an "image-orthicon tube" which has an x-ray effect. This camera penetrates Nixon's transparent skin and brings out (even just after a shave) the tiniest hair growing in the follicles beneath the surface. For the decisive first program Nixon wore a makeup called "Lazy Shave" which was ineffective under these conditions. He therefore looked haggard and heavy-bearded by contrast to Kennedy, who looked pert and clean-cut.

This greatest opportunity in American history to educate the voters by debating the large issues of the campaign failed. The main reason, as White points out, was the compulsions of the medium. "The nature of both TV and radio is that they abhor silence and 'dead time.' All TV and radio discussion programs are compelled to snap question and answer back and forth as if the contestants were adversaries in an intellectual tennis match. Although every experienced newspaperman and inquirer knows that the most thoughtful and responsive answers to any difficult question come after long pause, and that the longer the pause the more illuminating the thought that follows it, nonetheless the electronic media cannot bear to suffer a pause of more than five seconds; a pause of thirty seconds of dead time on air seems interminable. Thus, snapping their two-and-a-half-minute answers back and forth, both candidates could only react for the cameras and the people, they could not

think." Whenever either candidate found himself touching a thought too large for two-minute exploration, he quickly retreated. Finally the television-watching voter was left to judge, not on issues explored by thoughtful men, but on the relative capacity of the two candidates to perform under television stress.

Pseudo-events thus lead to emphasis on pseudo-qualifications. Again the self-fulfilling prophecy. If we test presidential candidates by their talents on TV quiz performances, we will, of course, choose presidents for precisely these qualifications. In a democracy, reality tends to conform to the pseudo-event. Nature imitates art.

We are frustrated by our very efforts publicly to unmask the pseudo-event. Whenever we describe the lighting, the makeup, the studio setting, the rehearsals, etc., we simply arouse more interest. One newsman's interpretation makes us more eager to hear another's. One commentator's speculation that the debates may have little significance makes us curious to hear whether another commentator disagrees.

Pseudo-events do, of course, increase our illusion of grasp on the world, what some have called the American illusion of omnipotence. Perhaps, we come to think, the world's problems can really be settled by "statements," by "summit" meetings, by a competition of "prestige," by overshadowing images, and by political quiz shows.

Once we have tasted the charm of pseudo-events, we are tempted to believe they are the only important events. Our progress poisons the sources of our experience. And the poison tastes so sweet that it spoils our appetite for plain fact. Our seeming ability to satisfy our exaggerated expectations makes us forget that they are exaggerated.

WILLIAM L. RIVERS

*The Negro and the News:
A Case Study*

The "human explosion" in Los Angeles, in the summer of 1965, that we call the Watts riots, shocked the country and caused a great deal of analysis and self-analysis of the role of the news media with relation to such an event. Did the coverage itself stimulate and feed the rioting? Dr. Rivers, who is a professor of communication at Stanford, points out that the McCone Report, like nearly every other large-scale investigation of race riots, "gingerly avoided exploring the role of the mass media." He himself displays no such reluctance, and he points out things that probably should not have been done, but on the whole comes out for more information rather than suppressing information. Concerning a penetrating series of stories on Watts published after the events of 1965, he quotes a reader: "Maybe if these stories had been published *before* the riots, there wouldn't have been any." This paper is a chapter in *Responsibility in Mass Communication*, revised edition, by William L. Rivers and Wilbur Schramm, published by Harper and Row, New York, 1969, copyrighted 1969 by the National Council of the Churches of Christ in the U.S.A. Copyright 1957 by the Federal Council of Churches of Christ in America. It is printed here by permission of the author and the publisher.

The ability to present news objectively and to interpret it realistically is not a native instinct in the human species; it is a product of culture which comes only with the knowledge of the past and acute awareness of how deceptive is our normal observation and how wishful is our thinking.

—WALTER LIPPMANN

AFTER THE HUMAN EXPLOSION in Los Angeles that has come to be called the "Watts Riots," the state of California began to look for causes and cures. John McCone, a no-nonsense businessman and former government official who had once headed the Central Intelligence Agency, was asked to investigate the conditions that had led to the riots. The work was well under way when staff executives of the McCone Commission became convinced that their wide-ranging investigation (which eventually employed more than forty staff workers and twenty-six con-

sultants) must probe into the involvement of the mass media. They invited a social researcher to plan a study. The staff endorsed the plan and then, with the researcher, went to McCone himself for final approval.

McCone was instantly and emphatically negative. The researcher had hardly begun to speak when McCone broke in with a long diatribe against journalists, especially their instinct for attack and their sensitivity. It was clear, he said, that any criticism of media performance would be "counter-productive." Not only would journalists react against the section of the commission report which dealt with their own derelictions, but their vengeful spirit would jeopardize the entire report.

To understand the full implications of McCone's fears, one must recognize his stature and be aware of his temperament. He is at the very center of the American Establishment, which is made up largely of those quiet movers and shakers who, regardless of political affiliation, serve and advise the leaders of both parties at the highest levels. (Significantly, Republican McCone has served both Democratic and Republican presidents. In California, he was invited by Democratic Governor Pat Brown to investigate the Watts riots—and by Republican Governor Ronald Reagan to investigate the student uprisings at Berkeley.) Moreover, McCone is a man of stern, authoritarian temper. One reporter who has interviewed him and was told of his timidity in this case whistled and exclaimed: "But McCone's such a *crusty* old man!" The clear question is: if *he* backs away from the threat of combat with the mass media, how deep are the secret fears of less abrasive public men?

All this helps to explain why nearly every large-scale investigation of race riots has gingerly avoided exploring the role of the mass media. The 101-page McCone Commission Report is typical. In three short, carefully worded paragraphs, it does little more than urge that journalists "meet and consider whether there might be wisdom in the establishment of guide lines, completely voluntary on their part, for reporting of such disasters."¹

¹ Governor's Commission on the Los Angeles Riots, *Violence in the City—An End or a Beginning?* (Los Angeles: Governor's Commission, 1965), pp. 84–85.

If investigators of race riots had chosen to analyze the role of the media rather than tiptoe around it, they would have traced one of the deepest roots of racial turmoil. And they could have done it almost as easily in Los Angeles and Detroit as in New Orleans and Jackson, Mississippi.

Gradually, officialdom is becoming convinced that the role of the media should be analyzed. In 1967, President Johnson appointed a Commission on Civil Disorders. The fourteenth in its list of charges was to determine what effects the mass media have on riots. The commission's report, which was issued in 1968, held that "elements of the news media failed to portray accurately the scale and character of the violence that occurred last summer. The overall effect was, we believe, an exaggeration of both mood and content." The President's commission paid tribute to the balanced factual accounts carried by most of the media, but it charged that important segments of the press "have not communicated to the majority of their audience—which is white—a sense of the degradation, misery and hopelessness of life in the ghetto." Television is especially guilty of flaunting before the ghetto the affluence of most of the white society, the commission held.

Senator Hugh Scott (R-Pennsylvania) and Representative Durward Hall (R-Missouri) became especially vocal about television after the riots during the summer of 1967. Senator Scott said: "The communications media must meet their responsibility to report the news, but to help dampen the fires burning in our cities they must avoid inciting to further violence by the very manner in which the news is carried." He suggested that the inflammatory speeches of H. Rap Brown and Stokely Carmichael be balanced with the voices of such responsible Negro leaders as Roy Wilkins, Whitney Young, and the late Martin Luther King. And, of course, television spokesmen were able to show that the voices of riot leaders were more than balanced by the voices of responsibility. CBS President Frank Stanton pointed out, for example, that during the three-week period of most intense rioting, Brown had appeared on CBS four times, Carmichael not at all, and Wilkins, Young, and King a total of ten times.

All this is in danger of missing the chief point.

The involvement of the mass media in the cruelest trouble of our time begins long before a riot threatens. The subtlety of this involvement can be drawn from a judgment made by Paul Lazarsfeld and Robert Merton: "Recognition by the press or radio or magazines or newsreels testifies that one has arrived.

. . . The audiences of the mass media apparently subscribe to the circular belief: If you really matter, you will be at the focus of mass attention, and if you are at the focus of mass attention, then surely you must really matter."²

It is paradoxical but true that at a time when "civil rights" is front-page language, the Negro has not arrived. Only the superstars in entertainment, athletics, and civil rights—like Sammy Davis, Jr., Willie Mays, and Martin Luther King—really matter. The everyday world of the Negro and the continuing substance of Negro life in the United States seem to matter not at all. Radio, television, films, magazines, and books occasionally focus on the Negro *plight*, which is only the most newsworthy aspect of his life. Only a few of the most enlightened newspapers give space to the three landmarks of Negro existence: birth, marriage, and death. The sensational papers have their own curious version of Jim Crow journalism: white men must be involved in murders—as slayers, as slain, or as both—to warrant the biggest headlines and the blackest type. (It is an ironic commentary on law enforcement publicity that "Public Enemy No. 1" is a label usually reserved for whites.)

The white world created by mass communication is more pervasive than any white can know. The late Judge Loren Miller of Los Angeles, who published the *California Eagle* in Watts before he became a municipal court judge, makes the point sharply in describing the effect of white culture on the Negro child: "His concept of beauty is inevitably a picture of the white bathing beauty on the billboards, the white girls who find Coca-Cola so exhilarating on the television, and the beautiful white debs on the society pages. Subconsciously, he knows

² P. F. Lazarsfeld and R. K. Merton, "Mass Communication, Popular Taste, and Organized Social Action," in W. Schramm, ed., *Mass Communication* (Urbana: University of Illinois Press, 1960), p. 498.

that his group is set aside and left out. That knowledge builds up the self-hate and self-contempt which is so prevalent in Negro life."

Judge Miller had always been outspoken, but it is usually difficult for outsiders to learn from other Negroes how bitterly they resent a mass culture which is so pervasively white. After the Watts riots, however, Negro intellectuals were eager to make outsiders aware. One who was interviewed, a psychiatrist, veered angrily from picturing the plight of the Negro child who reads comic strips in which "every Superman is white" to denouncing the media because "Negroes are portrayed in ninety per cent of the stories about them as problems." The same kind of point was made in a broadcast interview with a youth leader who works in the Hunters Point district of San Francisco, which was the scene of bitter riots in 1966. Asked why the Negroes of the district smashed television cameras, he replied: "Look, we're trying a lot of good things out here—drama groups, poetry readings, touch football games—and we always ask you reporters to come out and cover them. You never do. We only see you guys when you can show us at our worst."

Some newspapers are apparently aware that their Negro news is primarily problem-oriented. A few have tried to make Negro news an integral part of their continuing coverage of community life. Most have merely made it clear that they are luring additional readers. Even if the *Los Angeles Herald-Examiner* was motivated by the most praiseworthy goals when it began issuing a special weekly section on Negro life (a syndicated section not produced in Los Angeles), many Negroes both suspected that the motive was only monetary and resented the segregated attention. Curt Moody of the Community Relations Conference said, "I'm sure that by doing this the *Herald-Examiner* is trying to build up Negro circulation. The question that I ask is: Why can't these same feature articles be included day after day to be read by all rather than featured as something apart from the mainstream of community life?" This is a question neither newspapers nor the other media seem to have thought through.

The result of such estrangement is predictable. Although the Negro has a full opportunity to observe the white world through the mass media—indeed, he can hardly avoid it—communication flows only from white to Negro, hardly ever the other way. The one aspect of the Negro world that most whites are able to experience vicariously through the mass media is riotous and torn from its context. Few whites see Negroes except when the Negro community is inflamed.

It is not necessary to point the case by analyzing a sensationalist newspaper or television station in the bigotry belt. Some of the Negro's firmest friends in the mass media quite unconsciously distort the public view of his life. Consider *Life* magazine, which is editorially so devoted to integration that legions of segregationists have canceled their subscriptions. A study of all the integration crisis photographs which appeared in *Life* during 1962 and 1963—a period when most integration protests were characterized by passive resistance—revealed that more than half showed violence rather than passive resistance. In sharp contrast, only 20 percent of the integration crisis photographs published during the same period in *Ebony*, a *Life*-like magazine for Negroes, pictured violence, 80 percent showing passive resistance. Moreover, nearly 10 percent of all the photographs of Negroes which appeared in *Life* during this period were of Black Muslims, the most fearsome of the organized Negro groups. Only 1 percent of the photographs in *Ebony* were of Black Muslims.³

When reporters talk to Negroes, they often pick the wrong ones. It is easy to suspect that the journalistic habit of interviewing leaders—including Negro leaders like Detroit's two Congressmen—contributed to the shocked surprise when Detroit erupted in 1967. Negroes make the point over and over in interviews that reporters only *think* they know who the Negro leaders are. As in the white world, a Negro who leads one kind of opinion may not lead another. Relying upon the judgment of an NAACP leader or a congressman about the temper of the

³ Leslie Sargent, Wiley Carr, and Elizabeth McDonald, "Significant Coverage of Integration by Minority Group Magazines," *Journal of Human Relations* 14, no. 4 (1965).

Negro community is dangerous. That may be the chief lesson of the Detroit riot.

Cut off from the general world of the Negro, whites are often out of touch with basic Negro attitudes. "Black power" has become to them a fearsome phrase because the most militant and frustrated Negroes have made it seem a threat. In future riots, "black power" is likely to become a battle cry. But this threat obscures the fact that the phrase symbolizes an important and growing change in the American Negro. As one of them points out, there was a recent time when the appellation "black" was offensive. A Negro boy who called another Negro boy "black" either smiled disarmingly or prepared to defend himself. A Negro man considered "black" synonymous with "nigger." Now, however, "black man" is becoming a proud term. One cannot be certain whether this springs from pride in the spirited emergence of so many African nations, from pride in the American Negro's own struggle for civil rights and equal opportunity, or from a combination of these and other reasons. It is clear, however, that the increasing pride in being black which can be observed today among some Negroes may one day submerge the self-contempt that afflicts so many. More than a few Negro leaders and intellectuals who were long suspected of holding themselves above their fellows refer proudly to the black race and speak of "Negritude" in a way that gives it an almost mystical significance. Several intellectuals who were interviewed about Negro publications are quick to say that the newspapers and magazines aimed at the Negro community must be maintained to help preserve the Negro identity. Such are the positive, and largely unrecognized, aspects of "black power."

When whites attempt to bridge this gulf of misunderstanding, they usually communicate ineptly. Those with the best will may use the most wounding words, largely because they know so little of the context of Negro life that they do not know which words wound. Consider the McCone Commission Report, which is so carefully worded and so obviously the product of well-intentioned white men that other white men cannot really analyze it. One of the first sentences reads, "Many

Negroes moved to the city in the last generation and are totally unprepared to meet the conditions of city life." This seemed to the editorialists of the mass media who commented on the commission report to be so demonstrably true that it hardly deserved attention. Only a thoughtful Negro, Bayard Rustin, could see that the words were written from the point of view of the white man:

The burden of responsibility has already been placed on these hapless migrants to the cities. There is not one word about the conditions, economic as well as social, that have pushed the Negroes out of the rural areas; nor is there one word about whether the cities have been willing and able to meet the demand for jobs, adequate housing, proper schools. After all, one could as well say that it is the *cities* which have been totally unprepared to meet the conditions of Negro life, but the moralistic bias of the McCone Report, involving as it does an emphasis on the decisions of men rather than the pressures of social forces, continually operates in the other direction.⁴

In another section, the McCone Commission Report referred to the repeal in 1964 of the Rumford Act—the California fair housing law—with: "In addition, many Negroes here felt and were encouraged to feel that they had been affronted by the passage of Proposition 13." Again the editorial writers seemed to nod in agreement with demonstrable fact. And again Rustin made it clear that the words have a bitter flavor for Negroes: "Affronted, indeed! The largest state in the Union, by a three-to-one majority, abolishes one of its own laws against discrimination, and Negroes are described as regarding this as they might the failure of a friend to keep an engagement."⁵

Shortly after the San Francisco riots of 1966, KQED, one of the best educational television stations, invited two Negro spokesmen to an on-the-air discussion of job opportunities with labor leaders and employment officials. Sensing an unusual chance to be heard, the Negroes invited some of their friends.

⁴ Bayard Rustin, "The Watts 'Manifesto' & the McCone Report," *Commentary*, March, 1966, p. 30.

⁵ *Ibid.*, p. 31.

When the program began, more than twenty Negroes and whites were crowded into camera focus, but not for long. The discussion became a shouting match. Just before most of the Negroes walked out—which was well before the scheduled end of the program—one declared angrily that the moderator had allowed the white participants to make their points in full but had interrupted nearly every Negro. For at least a few white viewers, and perhaps for all, it was a startling truth that they had not been able to discern for themselves. One of the Negroes emphasized it by responding to the charge that *he* had interrupted the moderator with "Man, you been interruptin' me all my life!"

If the news media are all but oblivious to the Negro during those long periods when his life is a network of quiet indignities, the contrast is sharp when racial crisis erupts. So attentive have newsmen been to the civil rights struggle that George Hunt of *Life* has called the time since the 1954 Supreme Court decision which upset the separate-but-equal principle in education "a brilliant virtuoso period in the history of the American press."

Indeed, many journalists not only have made front-page news of racial crisis but have sometimes risked their lives to report it. First in the southern cities and towns, where many red-necks look on visiting journalists as tools of integration and treat them harshly, then in the troubled cities of the North, the Midwest, and the West, where the black power elite considers journalism a tool of the white power structure, reporters and photographers have needed courage, and many have shown it. During the long days and nights in Watts when the Negro war cry was "Get Whitey!" and men and women were dragged from their cars and beaten unconscious, white journalists roamed areas that were shunned by armed police. Snipers fired at those on foot and at others in a hovering helicopter. A *Life* photographer was so open and fearless in his lonely forays to photograph scenes of violence that one leader of a Negro mob stared at him in disbelief, laughed aloud at his audacity—and left him unharmed. Many reporters and photographers were hit by stones and bottles, several were beaten, and one was nearly

killed by two savage mob beatings in the space of half an hour.

By the standards of professional journalism, it all seemed worthwhile, for never has a riot been publicized so starkly and in such extravagant detail. During long periods, the police were informed of their own operations in danger zones chiefly through the news media. So intense was the reportage that millions of television viewers could have identified in a police line-up two looters who were followed by the camera as they trudged out of a burning store and down the street carrying a huge couch, and stopped occasionally to sprawl on it and rest.

One may applaud the courage, skill, and enterprise of such journalism and yet wonder: does intense riot coverage fan more flames than it describes?

We can begin to answer the question by quoting the sardonic observation of a television critic. When the managing editor of *American Opinion*, the John Birch Society magazine, said in a public speech that he hoped to make his first million dollars by cornering the spear concession in Watts, and radio and television stations did *not* race onto the air with the remark, "It was the first instance of electronic restraint on the question of the Los Angeles riots."

Considering some of the provocative statements that *were* put on the air, the critic's judgment is hardly too severe. Hour after hour was given over to broadcasting such a confusing *mélange* that rumor was institutionalized. "There's a report that one or two policemen are surrounded, so we're going over that way for a look," announced a newsman aboard the KTLA helicopter. The report was wrong, but as with so many other unfounded statements—the Shrine Auditorium is on fire, the Communists are now directing the riots, the Minute Men are invading Watts—the qualifying words ("There's a report," "police believe," and the like) got lost. In the continuing holocaust, rumor merged with vivid fact, and the qualifying words of careful reporters became entangled both in the reality and in the wild comments flowing from those call-in programs which cater to the subliterate. To the unknowing audience, it was all "news."

Even if one considers only the unvarnished facts of the Watts riots, the effects of news are awesome. As Judge Miller made clear, television was a "remarkable organizing force" for the rioters: "All you had to do was sit at the TV and look and you could say, 'Well, the police officers are there and the firemen are there, so we can do something over here.' Now this, of course, was not intentional on the part of TV; it was an inevitable part of the reporting system."

One need not condemn the system to question some of its methods. Los Angeles City Councilman Thomas Bradley pointed out, for example:

In the competition to secure exciting material for radio, television and newspaper, some went beyond the bounds of good judgment. As an example, there was a meeting called on the second day of the riot. This meeting occurred at Athens Park and was attended by several hundred community leaders. With one exception, the speakers were offering constructive ways of dealing with the outbreak of violence and were making suggestions as to how it could be controlled and the participants dissuaded.

The one exception was a 16-year-old boy who made threats that the burning would spread to the white community and made several irresponsible statements. The other people in the audience shouted him down, but this was the one and only phase of the entire meeting which was carried by the communications media.

Bradley is not alone in questioning this incident. Eight days after it occurred, Paul Udell of KNXT-TV in Los Angeles displayed on the air a film clip which showed the youth disrupting the meeting with a shout that he was "going to do the white man in tonight." Udell stated that KNXT had not shown the scene at the time "because we considered it inflammatory in the circumstances. Some stations disagreed."

Some of the other media disagreed as well. So many journalists were so shrill in their selectivity that readers, listeners, and viewers must have imagined that the entirety of Negro Los Angeles was in eruption. It was startling to learn when the Watts

riots were over that Police Chief William Parker, a stern and feared critic of troubled minorities, estimated that no more than 1 percent of Los Angeles' Negroes were involved.

If all this suggests that the news media are not concerned about their treatment of racial minorities, it is misleading. Those who complain that broadcasters and publishers are unaware of their responsibilities are themselves unaware of significant changes. The critics who say that the southern media remain unreconstructed can cite the case of WLBT, a television station in Jackson, Mississippi, which slanted news of the civil rights movement so obviously that in 1965 its management was rebuked and ordered to reform by the Federal Communications Commission. Few other broadcast stations or newspapers are as virulent, and none conforms to the stereotype established a century ago, when the *Natchez Courier* reacted to the Emancipation Proclamation in an editorial holding, "A monkey with his tail off is a monkey still," and the *Jackson Daily News* advised its readers: "We must keep the ex-slave in a position of inferiority. We must pass such laws as will make him *feel* his inferiority."

Today, few southern broadcasters and publishers are guilty of more than an unconscious bias that will not allow them to see that they view facts from a distorted perspective (a malady not limited by geography). A North Carolina publisher, for example, complained to United Press International: "As a new subscriber to U.P.I., I am beginning to realize why newspapers are so loaded with nothing but racial news centered around such people as Martin Luther King. In trying to get some items worthy of reading last night, I found long and constant harangues coming over the wire about this questionable person during his visit with an even more questionable organization in North Carolina." Checking up, a U.P.I. executive discovered that only one story on Martin Luther King had been dispatched that night, that it reported that King was entering a retreat of the Southern Christian Leadership Council, and that the story was only 150 words long.

Most southern broadcasters and publishers must stand up to pressure from local communities whose perspectives are far

more distorted. Southern media disseminate impartial news of the civil rights movement from United Press International, the Associated Press, and the national networks and syndicates on a scale that many Southerners consider scandalous. And at least three southern editors—Hodding Carter and Hazel Brannon Smith in Mississippi and Ralph McGill in Georgia—gave evidence in editorials of such clear understanding of Negro life and aspirations that many of their white readers consider them traitors.

A majority of the news media, North and South, long ago gave up the practice of identifying people in the news by race, except when racial identification is unavoidable. Northern as well as southern media have been focusing for years on the fact that there are ghettos everywhere, some of the worst in the great cities of the North. Negro faces have been turning up more and more often in advertisements, in news pictures, and in television dramas.

There has also been progress in reporting civil disorder. Shaken by charges that their reporting of riots often has the effect of pouring gasoline on a fire, journalists have been reappraising their own practices. New guidelines were developed in Chicago in the 1950's and spread swiftly to other cities. After the Watts riots, Dr. Theodore Kruglak and Dr. Kenneth Harwood of the University of Southern California conferred with reporters, then drew up more extensive guidelines that have been widely praised:

1. Avoid emphasizing stories on public tensions while the tensions of a particular incident are developing. Ask the law enforcement agency involved whether the developing incident is designated as a disturbance of the peace or otherwise. Report the official designation of the incident.
2. Public reports should not state the exact location, intersection, street name or number until authorities have sufficient personnel on hand to maintain control.
3. Immediate or direct reporting should minimize interpretation, eliminate airing of rumors, and avoid using unverified statements.
4. Avoid reporting trivial incidents.

5. Because inexpert use of cameras, bright lights, or microphones may stir exhibitionism, great care should be exercised by crews at scenes of public disorders. Because, too, of the danger of injury or even death to news personnel, their presence should be as unobtrusive as possible. Unmarked vehicles should be used for initial evaluation of events of this nature.
6. Cruising in an area of potential crisis may invite trouble. Reporters should make full use of the law enforcement headquarters nearest such an area until a newsworthy event occurs.
7. Reporters who are at the scene of an explosive or potentially explosive situation should avoid reporting of interviews with obvious "inciters."
8. Reporters should inform in advance any person who is interviewed that the interview may be made public.
9. Scare headlines, scare bulletins, and sensationalism of other kinds should be avoided in magazines, newspapers, radio, and television.
10. All news media should make every effort to assure that only seasoned reporters are sent to the scene of a disaster.
11. No report should use superlatives or adjectives which might incite or enlarge a conflict, or cause renewal of trouble in areas where disturbances have quieted.
12. Advisory data for discretionary use by newsmen should be written in calm, matter-of-fact sentences. This is to avoid inflammatory results from unintended public report of discretionary information. Honest and dispassionate reporting is the best reporting.
13. Reporters should not detail how any weapon is obtained, made, or used.
14. Reporters should not identify precise locations of command posts of public officials, police, fire units, or military units.
15. Every reporter and technician should be governed by the rules of good taste and common sense. The potential for inciting public disorders demands that competition be secondary to the cause of public safety.

The changes we have noted and the guidelines for reporting civil disorder are certainly valuable, but they do not prescribe the most compelling necessity: to report violence in its full con-

text. That is, the news media must make it clear that the savage threat of the sixteen-year-old at the Athens Park meeting was shouted down by peaceful voices and was not at all indicative of the majority sentiment. They must make it clear that many Negroes, some of them teenagers, worked tirelessly to persuade the rioters to "cool it." They must make it clear that violence is not total merely because there are episodes of violence. Above all, the news media must focus on *why* there is unrest, and well before rioting breaks out.

The need for reporting inflammatory statements and acts of violence in their full context becomes most apparent when one examines those cities where a quite different practice is in operation—suppressing news of civil disorder. The two newspapers in Dallas, the *News* and the *Times-Herald*, initiated just such a policy in 1960, immediately before a visit to the city by Roy Wilkins of the National Association for the Advancement of Colored People. Felix McKnight of the *Times-Herald* recounts that many of Dallas's civic leaders and news media executives were brought together in the *Times-Herald's* offices. "Out of this, we selected a standing committee of fourteen, seven white and seven black. We set up some standards, some ground rules for both sides—and both papers. It has paid tremendous dividends to the *News* and us, and to the city."

A businessman who is chairman of a similar biracial commission in another city was candid (although anonymous) in describing its operations for *Columbia Journalism Review*:

In my city, we have made progress in eliminating racial friction and in establishing just racial relations because our newspapers and our broadcasting stations have joined in what journalists would call a conspiracy to suppress the news. . . . Local businessmen, drawn largely from the Chamber of Commerce, took the initiative in forming a commission. As ultimately constituted, the commission was made up of businessmen and professionals of both races, representatives of all the newspapers, white and colored, and the broadcasting stations. . . . There was a public announcement of the original formation of the commission. Thereafter, by agreement, news coverage of its actions ceased. There has not been a single news

item published about its meetings, about the particular issues it has discussed, or about the steps it has taken to bring about the desegregation of publicly used facilities.

Here is one example of how the commission has worked: Leaders of the Negro community were especially eager last year to establish the *right* of Negro citizens to eat at downtown lunch counters, where the sit-ins had failed. After long negotiations, the proprietors agreed to serve Negroes starting on an agreed date. In their turn, the Negro members of the commission agreed to select representatives of their race to go to the lunch counters on that date in small numbers. There was no incident, no demonstration. Since that beginning, Negroes have continued to patronize the counters in small numbers, scarcely noticed—because there have been no news stories on the subject.

. . . I am convinced that if these matters had received normal news treatment, the alarm would have sounded among the Ku Klux Klan and the redneck types, and that they would have been there with their baseball bats and ax handles; extremists among the Negroes would have responded in kind.⁶

These arguments are superficially persuasive. It is probably true that agreements to suppress the news prevented violence. And there may be occasions when journalists should fail to report pivotal events—but it is unlikely that these can be foreseen, and unimaginable that responsible journalists should help plan them. It is dismaying to contemplate journalists, who should be committed to breaking through walls of secrecy, helping to build them—especially in the company of civic leaders, many of whom are eager to promote the kind of friendship that leads to country club journalism. Journalists who march beside the First People of a community can neither see nor report the broad sweep of community life. Without a persistent and questioning journalism, civic leaders and public officials are unlikely to push the police into upholding the law when the Ku Klux Klan and the redneck types appear with their baseball bats and ax handles. If they are not held to ac-

⁶ Anonymous, "A Case for News Suppression." *Columbia Journalism Review* 2, no. 3 (1963): 11-12.

count, the First People are all too likely to consider the Negro response to bats and ax handles the deplorable actions of "extremists."

The chief objection to these comfortable conspiracies is that news suppression of another kind has helped to create crisis situations. For surely the ingrained habit of gathering news and opinion from civic leaders and officials has long prevented journalists from assessing Negro poverty and inequality. Here the necessity for full context is all-important. We might not now be experiencing such a cataclysmic period had the news media alerted us to the pitiful conditions of Negro life decades ago. The context of history has long been absent. At the very least, journalistic explorations of ghetto existence would have enabled us to understand the violence that accompanies the modern demand for civil rights. Such reportage might have helped make the Negro American an integral part of his society rather than an unhappy graft upon it. Or, as one reader of a penetrating series on Watts by Jack Jones of the *Los Angeles Times* said: "Maybe if these stories had been published *before* the riots, there wouldn't have been any."

The reader was not suggesting, of course, that there is a magic preventive in a series of newspaper articles. He meant that the series would have helped to create a climate of concern about Negro life that might have prodded the community, especially community leaders, into correcting economic and social injustice. Although this is more than a single newspaper can accomplish—it is a national problem—one can imagine a concert of all the mass media awakening the nation to its responsibility. The question now is whether it is too late, whether the hour for understanding has passed. In some cities where the news media are now attempting to report fully on the conditions of Negro life, there is little evidence that they are helping to reverse the tide of violence.

No one can doubt that mistakes have been made in covering riots. But it is also clear that not even the most public-spirited newspaperman or broadcaster could have turned for guidance to any code of ethics; none could embrace all the decisions that

had to be made. Nor could the best-informed newspaperman or broadcaster have predicted the full effect of the decisions he made. Responsible performance in a democratic society is a standard that evolves out of a cumulative series of decisions, reflecting a way of life and the needs of a society.

KURT LANG AND GLADYS ENGEL LANG

*The Unique Perspective
of Television and Its Effect:
A Pilot Study*

When General Douglas MacArthur returned to the United States from Korea in 1951, his progress across the country was more like a triumphal procession than the return of a general who had been removed from his command by the President. Among his stops was Chicago, where welcoming ceremonies at the airport, a parade through the city, and an evening address to a vast audience at Soldiers Field had been arranged for him. A group of social scientists had the foresight to use this natural event to study the performance and effect of television. They posted observers at various points to observe the parade itself and obtain samples of the crowd reaction. At the same time, they analyzed carefully the pictures of the parade that appeared on television. Not surprisingly, they found a wide disparity between the event as seen in person and the televised event. Their analysis of how television, because it is the kind of medium it is and because of what its viewers expect of it, reports a public event makes interesting reading beside the McLuhan chapter on media effect, the Boorstin chapter on the creation of pseudo-events, and the Rivers chapter on the responsibility of the news media for what they cover. Dr. Lang is a professor of sociology at Stonybrook College, in the state university system of New York, and Mrs. Lang until recently has been on the staff of the Center for Urban Education, New York. The paper won the research prize for 1952 of the Edward L. Bernays Foundation, and is published by permission of the Foundation and the authors.

THIS PAPER aims to investigate a public event as viewed over television or, to put it differently, to study in the context of public life an event transmitted over video. The concern is not with the effects of television on individual persons, irrespective of the spread of this effect. Our assumption is, on the contrary, that the effect of exposure to TV broadcasting of public events cannot be measured most successfully in isolation. For the influence on one person is communicated to others, until the significance attached to the video event overshadows the "true"

picture of the event, namely the impression obtained by someone physically present at the scene of the event. The experience of spectators may not be disseminated at all or may be discounted as the biased version of a specially interested participant. Or, again, the spectator's interpretation of his own experience may be reinterpreted when he finds the event in which he participated discussed by friends, newspapermen, and radio commentators. If the significance of the event is magnified, even casual spectatorship assumes importance. The fact of having "been there" is to be remembered—not so much because the event, in itself, has left an impression, but because the event has been recorded by others. At the opposite extreme, privately significant experiences, unless revived in subsequent interpersonal relations, soon recede into the deeper layers of memory.

By taking MacArthur Day in Chicago,¹ as it was experienced by millions of spectators and video viewers, we have attempted to study an event transmitted over video. The basis of this report is the contrast between the actually recorded experience of participant observers on the scene, on the one hand, and the picture which a video viewer received by way of the television screen, and the way in which the event was interpreted, magnified, and took on added significance, on the other. The contrast between these two perspectives from which the larger social environment can be viewed and "known" forms the starting point for the assessment of a particular effect of television in structuring public events.

The Research Design

The present research was undertaken as an exploration in collective behavior.² The design of the communications analy-

¹"MacArthur Day in Chicago" includes the following occasions which were televised: arrival at Midway Airport, parade through the city including the dedication at the Bataan-Corregidor Bridge, and the evening speech at Soldiers Field.

²This paper reports only one aspect of a larger study of MacArthur Day in Chicago. This writeup is limited to drawing together some of the implications concerning the role of television in public events, this particular study being

sis differs significantly from most studies of content analysis. The usual process of inferring effect from content and validating the effect by means of interviews with an audience and control group is reversed. A generally apparent effect, i.e., the "landslide effect" of national indignation at MacArthur's abrupt dismissal and the impression of enthusiastic support, bordering on "mass hysteria," given to him, was used to make inferences on given aspects of the television content. The concern was with the picture disseminated, especially as it bore on the political atmosphere. To explain how people could have a false imagery (the implication of participant observational data), it was necessary to show how their perspective of the larger political environment was limited and how the occasion of Chicago's welcome to MacArthur, an event mediately known already, was given a particular structure. The concern is how the picture of the events was shaped by selection, emphasis, and suggested inferences which fitted into the already existing pattern of expectations.

The content analysis was therefore focused on two aspects—the selections made by the camera and their structuring of the event in terms of foreground and background, and the explanation and interpretations of televised events given by commentators and persons interviewed by them. Moreover, each monitor was instructed to give his impression of what was happening, on the basis of the picture and information received by way of television. The monitors' interpretations and subjective impressions were separately recorded. They served as a check that considered as a pilot study for the framing of hypotheses and categories prerequisite for a more complete analysis of other such events in general. The present study could not test these categories, but was limited to an analysis of the television content in terms of the observed "landslide effect" of the telecast. The authors wish to express their indebtedness to Dr. Tamatsu Shibutani (then of the Department of Sociology, University of Chicago) for lending his encouragement and giving us absolute freedom for a study which, due to the short notice of MacArthur's planned arrival in Chicago, had to be prepared and drawn up in three days, and for allowing his classes to be used for soliciting volunteers. No funds of any sort were at our disposal. Dr. Donald Horton was kind enough to supply us with television sets and tape recorders. In discussions of the general problems involved in the analysis of television content, he has indirectly been of invaluable aid. Finally, we are indebted to the other twenty-nine observers, without whose splendid cooperation the data could never have been gathered.

the structure inferred from the two operations of "objective" analysis of content were, in fact, legitimate inferences.³ At the same time, utilizing the categories of the objective analysis, the devices by which the event was structured could be isolated, and the specific ways in which television reportage differed from the combined observations could be determined.

Thirty-one participant observers took part in the study. They were spatially distributed to allow for the maximum coverage of all the important phases of the day's activities, i.e., no important vantage point of spectatorship was neglected. Since the events were temporally distributed, many observers took more than one station, so that coverage was actually based on more than thirty-one perspectives. Thus the sampling error inherent in individual participant observation or unplanned mass observation was greatly reduced. Observers could witness the arrival at Midway Airport and still arrive in the Loop area long before the scheduled time for the parade. Reports were received from forty-three points of observation.

Volunteers received instruction sheets which drew their attention to principles of observation⁴ and details to be carefully recorded. Among these was the directive to take careful note of any activity indicating possible influences of the televising of the event upon the behavior of spectators, e.g., actions specifically addressed to the cameras, indications that events were staged with an eye toward transmission over television, and the like.

³ That this check together with our observation of the general impression left by MacArthur Day constitutes only a very limited validation is beyond question. Under the conditions of the study—carried on without financial support and as an adjunct to other research commitments—it was the best we could do.

⁴ Analysis of personal data sheets, filled out by participants prior to MacArthur Day, revealed that "objectivity" in observation was not related to political opinion held, papers and periodicals subscribed to, and previous exposure to radio or TV coverage of MacArthur's homecoming. The significant factor in evaluating the reports for individual or deviant interpretation was found to reside in the degree to which individual observers were committed to scientific and objective procedures. Our observers were all advanced graduate students in the social sciences.

Summary of Findings

THE PATTERN OF EXPECTATIONS

The mass observation concentrated on discerning the psychological structure of the unfolding event in terms of present and subsequent anticipations. Certainly the crowd which turned out for the MacArthur Day celebration was far from a casual collection of individuals: the members *intended* to be witnesses to this "unusual event." One may call these intentions specific attitudes, emergent acts, expectations, or predispositions. Whatever the label, materials on these patterns of expectations were taken from two sources: (1) all statements of spectators recorded in the observer reports which could be interpreted as indicative of such expectations (coded in terms of the inferences therein); (2) personal expectations of the thirty-one study observers (as stated in the personal questionnaire).

Though not strictly comparable—since the observations on the scene contained purely personal, very short-range, and factually limited expectations—both series of data provide confirmation of a basic pattern of observer expectations. The persons on the scene *anticipated* "mobs" and "wild crowds." They expected some disruption of transportation. Their journey downtown was in search of adventure and excitement. Leaving out such purely personal expectations as "seeing" and "greeting," the second most frequent preconception emphasizes the extraordinary nature of the preparations and the entertaining showmanship connected with the spectacle.

As a result of an unfortunate collapsing of several questions regarding personal data into one, the response did not always focus properly on what the observers "expected to see." In some cases no evidence or only an incomplete description of this aspect was obtained. Of those answering, 68 percent expected excited and wildly enthusiastic crowds. But it is a safe inference from the discussion during the briefing session that this figure tends to underestimate the number who held this type of imagery. The main incentive to volunteer resided, after

all, in the opportunity to study crowd behavior at first hand.

To sum up: most people expected a wild spectacle, in which the large masses of onlookers would take an active part, and which contained an element of threat in view of the absence of ordinary restraints on behavior and the power of large numbers.

THE ROLE OF MASS MEDIA IN THE PATTERN OF EXPECTATIONS

A more detailed examination of the data supports the original assumption that the pattern of expectations was shaped by way of the mass media. For it is in that way that the picture of the larger world comes to sophisticated as well as unsophisticated people. The observers of the study were no exception to this dependence on what newspapers, newsreels, and television cameras mediated. They were, perhaps, better able than others to describe the origin of these impressions. Thus Observer 14 wrote in evaluating his report and his subjective feelings:

I had listened to the accounts of MacArthur's arrival in San Francisco, heard radio reports of his progress through the United States, and had heard the Washington speech as well as the radio accounts of his New York reception. . . . I had therefore expected the crowds to be much more vehement, contagious, and identified with MacArthur. I had expected to hear much political talk, especially anti-Communist and against the Truman administration.

These expectations were completely unfulfilled. I was amazed that not once did I hear Truman criticized, Acheson mentioned, or as much as an allusion to the Communists. . . . I had expected roaring, excited mobs; instead there were quiet, well ordered, dignified people. . . . The air of curiosity and casualness surprised me. Most people seemed to look on the event as simply something that might be interesting to watch.

Other observers made statements of a very similar content.

Conversation in the crowd pointed to a similar awareness. Talk repeatedly turned to television, especially to the comparative merit of "being there" and "seeing it over TV." An effort was consequently made to assess systematically the evidence

bearing on the motives for being there in terms of the patterns of expectations previously built up. The procedures of content analysis served as a useful tool, allowing the weighing of all evidence *directly* relevant to this question in terms of confirmatory and contrary evidence. The coding operation involved the selection of two types of indicators: (1) general evaluations and summaries of data; and (2) actual incidents of behavior which could support or nullify our hypothesis.

Insofar as the observers had been instructed to report concrete behavior rather than general interpretations, relatively few such generalizations are available for tabulation. Those given were used to formulate the basic headings under which the concrete evidence could be tabulated. The generalizations fall into two types: namely, the crowds had turned out to see a great military figure and a public hero "in the flesh"; and—its logical supplement—they had turned out not so much "to see *him*, as I noticed, but to see the spectacle" (Observer 5). Six out of eleven concretely stated propositions were of the second type.

An examination of the media content required the introduction of a third heading, which subdivided the interest in MacArthur into two distinct interpretations; that people had come to find vantage points from which to see the man and his family; or, as the official (media and "Chicago official") version held, that they had come to welcome, cheer, and honor him. Not one single observer, in any generalized proposition, confirmed the official generalization, but there was infrequent mention of isolated incidents which would justify such an interpretation.

The analysis of actual incidents, behavior, and statements recorded is more revealing. A gross classification of the anticipations which led people to participate is given (according to categories outlined above) in Table 1.

A classification of these observations by area in which they were secured gives a clear indication that the Loop throngs thought of the occasion *primarily* as a spectacle. There, the percentage of observations supporting the "spectacle hypothesis" was 59.7. The percentage in other areas was: Negro dis-

tract, 40.0; Soldiers Field, 22.9; Airport, 17.6; University district, 0.0. Moreover, of the six generalizations advanced on crowd expectations in the Loop, five interpreted the prevalent motivation as the hope of a wild spectacle.

Thus a probe into motivation gives a confirmatory clue regarding the pattern of expectations observed. To this body of data, there should be added the constantly overheard expressions—as the time of waiting increased and excitement failed to materialize—of disillusionment with the particular vantage point. "We should have stayed home and watched it on TV," was the almost universal form that the dissatisfaction took. In relation to the spectatorship experience of extended boredom and sore feet, alleviated only by a brief glimpse of the hero of the day, previous and similar experiences over television had been truly exciting ones which promised even greater

TABLE 1. TYPES OF SPECTATOR INTEREST

Form of Motivation	%
Active hero worship	9.2
Interest in seeing MacArthur	48.1
Passive interest in spectacle	42.7
Total	100.0

"sharing of excitement" *if only one were present*. These expectations were disappointed and favorable allusions to television in this respect were frequent. To present the entire body of evidence bearing on the inadequate release of tension and the widely felt frustration would be to go beyond the scope of this report, in which the primary concern is the study of the television event. But the materials collected present unequivocal proof of the foregoing statements, and this—with one qualified exception—is also the interpretation of each one of the observers.

Moreover, the comparison of the television perspective with that of the participant observers indicates that the video aspects of MacArthur Day in Chicago served to *preserve* rather than

disappoint the same pattern of expectations among the viewers. The main difference was that television remained true to form until the very end, interpreting the entire proceedings according to expectations. No hint about the disappointment in the crowd was provided. To cite only one example, taken from what was the high point in the video presentation, the moment when the crowds broke into the parade by surging out into State Street:

The scene at 2:50 P.M. at State and Jackson was described by the announcer as the "most enthusiastic crowd *ever* in our city. . . . You can feel the tenseness in the air. . . . You can hear that crowd roar." The crowd was described as pushing out into the curb with the police trying to keep it in order, while the camera was still focusing on MacArthur and his party. The final picture was of a bobbing mass of heads as the camera took in the entire view of State Street northward. To the monitor, this mass of people appeared to be pushing and going nowhere. And then, with the remark, "The whole city appears to be marching down State Street behind General MacArthur," holding the picture just long enough for the impression to sink in, the picture was suddenly blanked out.

Observer 26, who was monitoring this phase of the television transmission, reported her impression:

. . . the last buildup on TV concerning the "crowd" (cut off as it was, abruptly at 3:00 P.M.) gave me the impression that the crowd was pressing and straining so hard that it was going to be hard to control. My first thought, "I'm glad I'm not in that" and "I hope nobody gets crushed."

But observers near State and Jackson did not mention the event in an extraordinary context. For example, Observer 24 explained that as MacArthur passed:

Everybody strained but few could get a really good glimpse of him. A few seconds after he had passed most people merely turned around to shrug and to address their neighbors with such phrases: "That's all," "That was it," "Gee, he looks just as he does in the movies," "What'll we do now?" Mostly teenagers and others with no specific plans flocked into the street after

MacArthur, but very soon got tired of following as there was no place to go and nothing to do. Some cars were caught in the crowd, a matter which, to the crowd, seemed amusing.

THE STRUCTURE OF THE TV PRESENTATION

The television perspective was different from that of any spectator in the crowd. Relatively unlimited in its mobility, it could order events in its own way by using close-ups for what was deemed important and leaving the apparently unimportant for the background. There was almost complete freedom to aim cameras in accordance with such judgments. The view, moreover, could be shifted to any significant happening, so that the technical possibilities of the medium itself tended to play up the dramatic. While the spectator, if fortunate, caught a brief glimpse of the General and his family, the television viewer found him the continuous center of attraction from his first appearance during the parade at 2:21 P.M. until the sudden blackout at 3:00 P.M. For almost forty minutes, not counting his seven-minute appearance earlier in the day at the airport and his longer appearance at Soldiers Field that evening, the video viewer could fasten his eyes on the General and on what could be interpreted as the interplay between a heroic figure and the enthusiastic crowd. The cheering of the crowd seemed not to die down at all, and even as the telecast was concluded, it only seemed to have reached its crest. Moreover, as the camera focused principally on the parade itself, the crowd's applause seemed all the more ominous a tribute from the background.

The shots of the waiting crowd, the interviews with persons within it, and the commentaries, had previously prepared the viewer for this dramatic development. Its resolution was left to the inference of the individual. But a sufficient number of clues had already come over television to leave little doubt about the structure. Out of the three-hour daytime telecast, in addition to the time that MacArthur and party were the visual focus of attention, there were over two hours which had to be filled with visual material and vocal commentary. By far the

largest amount of time was spent on anticipatory shots of the crowd. MacArthur himself held the picture for the second-longest period; thus the ratio of time spent viewing MacArthur to time spent anticipating his arrival is much greater for the TV observer than for the spectator on the scene.

The descriptive accounts of the commentators (also reflected in the interviews)⁵ determined the structure of the TV presentation of the day's events. The idea of the magnitude of the event, in line with preparations announced in the newspapers, was emphasized by constant reference. The most frequently employed theme was that "no effort has been spared to make this day memorable" (eight references). There were seven direct references to the effect that the announcer had "never seen the equal to this moment" or that it was the "greatest ovation this city had ever turned out." The unique cooperative effort of TV received five mentions and was tied in with the "dramatic" proportions of the event. It was impossible to categorize and tabulate all references, but they ranged from a description of crowded transportation and numerical estimates of the crowd to the length of the city's lunch hour and the state of "suspended animation" into which business had fallen. There was repeated mention that nothing was being allowed to interfere with the success of the celebration; even the ball game had been cancelled.⁶ In addition to these purely formal aspects of the event, two—and only two—aspects of the spectacle were *stressed*: (1) the unusual nature of the event; (2) the tension

⁵ An analysis of televised interviews is omitted in this condensation. Interviews obtained for the study by observers posing as press representatives elicited responses similar to those given over TV. Without exception, those questioned referred to the magnitude, import, and other formal aspects of the event. These stand in contrast to results obtained through informal probes and most overheard conversation. One informant connected with television volunteered that television announcers had had specific instructions to emphasize that this was a "dramatic event." Another of Chicago's TV newsmen noted that throughout the telecast the commentary from each position made it sound as if the high points of the day's activity were about to occur or were occurring right on their own spot.

⁶ The day's activities at a nearby race track were not cancelled. At one point in the motorcade from the airport to the Loop, a traffic block resulted in a partially "captive audience." An irritated "captive" remarked, "I hope this doesn't make me late for the races."

which was said to pervade the entire scene. Even the references to the friendly and congenial mood of the waiting crowd portended something about the change that was expected to occur.

Moreover, in view of the selectivity of the coverage with its emphasis on close-ups,⁷ it was possible for each viewer to see himself in a *personal* relationship to the General. As the announcer shouted out: "Look at that chin! Look at those eyes!"—each viewer, regardless of what might have been meant by it, could seek a personal interpretation which best expressed, for him, the real feeling underlying the exterior which appeared on the television screen.⁸

It is against the background of this personal inspection that the significance of the telecast must be interpreted. The cheering crowd, the "seething mass of humanity," was fictionally endowed by the commentators with the same capacity for a direct and personal relationship to MacArthur as the one which television momentarily established for the TV viewer through its close-up shots. The net effect of television thus stems from a convergence of these two phenomena: namely, the seemingly extraordinary scope of the event together with the apparent enthusiasm accompanying it and personalizing influence just referred to. In this way the public event was interpreted in a very personal nexus. The total effect of so many people, all shouting, straining, cheering, waving in personal welcome to the General, disseminated the impression of a universal, enthusiastic, overwhelming ovation for the General. The selectivity of the camera and the commentary gave the event a personal dimension, nonexistent for the participants in the crowds, thereby presenting a very specific perspective which contrasted with that of direct observation.

⁷ In a subsequent interview, a TV producer explained his conception of the MacArthur Day coverage as "being the best in the country." He especially recalled bracketing and then closing in on the General during the motorcade, the assumption being that he was the center of attraction.

⁸ During the evening ceremonies, MacArthur's failure to show fatigue in spite of the strenuous experiences of the day received special notice. A report from a public viewing of the evening speech indicates the centering of discussion about this "lack of fatigue" in relation to the General's advanced years (Observer 24).

OTHER INDEXES OF THE DISCREPANCY

In order to provide a further objective check on the discrepancies between observer impressions and the event as it was interpreted by those who witnessed it over television, a number of spot checks on the reported amount of participation were undertaken. Transportation statistics, counts in offices, and the volume of sales reported by vendors provided such indices.

The results substantiate the above finding. The city and suburban lines showed a very slight increase over their normal loads. To some extent the paltry 50,000 increase in inbound traffic on the street cars and elevated trains might even have been due to rerouting. The suburban lines had their evening rush hour moved up into the early afternoon—before the parade had begun.

Checks at luncheonettes, restaurants, and parking areas indicated no unusual crowding. Samplings in offices disclosed only a minor interest in the parade. Hawkers, perhaps the most sensitive judges of enthusiasm, called the parade a "puzzler" and displayed unsold wares.

DETAILED ILLUSTRATION OF CONTRAST

The bridge ceremony provides an illustration of the contrast between the two perspectives. Seven observers witnessed this ceremony from the crowd.

TV perspective: in the words of the announcer, the Bridge ceremony marked "one of the high spots, if not the high spot of the occasion this afternoon. . . . The parade is now reaching its climax at this point."

The announcer, still focusing on MacArthur and the other participating persons, took the opportunity to review the ceremony about to take place. . . . The camera followed and the announcer described the ceremony in detail. . . . The camera focused directly on the General, showing a close-up. . . . There were no shots of the crowd during this period. But the announcer filled in. "A great cheer goes up at the Bataan Bridge,

where the General has just placed a wreath in honor of the American boys who died at Bataan and Corregidor. You have heard the speech . . . the General is now walking back . . . the General now enters his car. This is the focal point where all the newsreels . . . frankly, in 25 years of covering the news, we have never seen as many newsreels gathered at one spot. One, two, three, four, five, six. At least eight cars with newsreels rigged on top of them, taking a picture that will be carried over the entire world, over the Chicagoland area by the combined network of these TV stations of Chicago, which have combined for this great occasion and for the solemn occasion which you have just witnessed."

During this scene there were sufficient close-ups for the viewer to gain a definite reaction, positive or negative, to the proceedings. He could see the General's facial expressions and what appeared to be momentary confusion. He could watch the activities of the Gold Star mothers in relation to MacArthur and define this as he wished—as inappropriate for the bereaved moment or as understandable in the light of the occasion. Taking the cue from the announcer, the entire scene could be viewed as rushed. Whether or not, in line with the official interpretation, the TV viewer saw the occasion as *solemn*, it can be assumed that he expected that the participant on the scene was, in fact, experiencing the occasion in the same way as he.

Actually, this is the way what was meant to be a solemn occasion was experienced by those attending, and which constitutes the crowd perspective. The dedication ceremony aroused little of the sentiment it might have elicited under other conditions. According to Observer 31, "People on our corner could not see the dedication ceremony very well, and consequently after he had passed immediately in front of us, there was uncertainty as to what was going on. As soon as word had come down that he had gone down to his car, the crowd dispersed." Observer 8 could not quite see the ceremony from where he was located on Wacker Drive, slightly east of the bridge. Condensed descriptions of two witnesses illustrate the confusion which sur-

rounded the actual wreath-laying ceremony (three other similar descriptions are omitted here).

It was difficult to see any of them. MacArthur moved swiftly up the steps and immediately shook hands with people on the platform waiting to greet him. There was some cheering when he mounted the platform. He walked north on the platform and did not reappear until some minutes later. In the meantime the crowd was so noisy that it was impossible to understand what was being broadcast from the loudspeakers. Cheering was spotty and intermittent, and there was much talk about Mrs. MacArthur and Arthur . . . (Observer 2).

Those who were not on boxes did not see MacArthur. They did not see Mrs. MacArthur, but only her back. MacArthur went up on the platform, as we were informed by those on boxes, and soon we heard some sound over the loudspeakers. Several cars were standing in the street with their motors running. . . . Some shouted to the cars to shut their motors off, but the people in the cars did not care or did not hear.

. . . The people in our area continued to push forward trying to hear. When people from other areas began to come and walk past us to go toward the train, the people in our area shrugged their shoulders. "Well, I guess it's all over. That noise must have been the speech." One of the three men who had stood there for an hour or more, because it was such a good spot, complained, "This turned out to be a lousy spot. I should have gone home. I bet my wife saw it much better over television" (Observer 30).

Regardless of good intentions on the part of planners and despite any recognition of the solemn purpose of the occasion by individuals in the crowd, the solemnity of the occasion was destroyed, if for no other reason, because officials in the parade were so intent upon the time schedule and cameramen so intent upon recording the solemn dedication for the TV audience and for posterity that the witnesses could not see or hear the ceremony, or feel "solemn" or communicate a mood of solemnity. A crowd of confused spectators, cheated in their hopes of seeing a legendary hero in the flesh, was left unsatisfied.

RECIPROCAL EFFECTS

There is some direct evidence regarding the way in which television imposed its own peculiar perspective on the event. In one case an observer on the scene would watch both what was going on and what was being televised.

It was possible for me to view the scene (at Soldiers Field) both naturally and through the lens of the television camera. It was obvious that the camera presented quite a different picture from the one received otherwise. The camera followed the General's car and caught that part of the crowd immediately opposite the car and about 15 rows above it. Thus it caught that part of the crowd that was cheering, giving the impression of a solid mass of wildly cheering people. It did not show the large sections of empty stands, nor did it show that people stopped cheering as soon as the car passed them (Observer 13).

In much the same way, the television viewer received the impression of wildly cheering and enthusiastic crowds before the parade. The camera selected shots of the noisy and waving audience, but in this case, the television camera itself created the incident. The cheering, waving, and shouting was often largely a response to the aiming of the camera. The crowd was thrilled to be on television, and many attempted to make themselves apparent to acquaintances who might be watching. But even beyond that, an event important enough to warrant the most widespread pooling of television facilities in Chicago video history acquired in its own right some magnitude and significance. Casual conversation continually showed that being on television was among the greatest thrills of the day.

Conclusion

It has been claimed for television that it brings the truth directly into the home: the "camera does not lie." Analysis of the above data shows that this assumed reportorial accuracy is far from automatic. Every camera selects, and thereby leaves the unseen part of the subject open to suggestion and inference.

The gaps are usually filled in by a commentator. In addition the process directs action and attention to itself.

Examination of a public event by mass observation and by television revealed considerable discrepancy between these two experiences. The contrast in perspectives points to three items whose relevance in structuring a televised event can be inferred from an analysis of the television content:

- (1) technological bias, i.e., the necessarily arbitrary sequence of telecasting events and their structure in terms of foreground and background, which at the same time contains the choices on the part of the television personnel as to what is important;
- (2) structuring of an event by an announcer, whose commentary is needed to tie together the shifts from camera to camera, from vista to close-up, helping the spectator to gain the stable orientation from one particular perspective;
- (3) reciprocal effects, which modify the event itself by staging it in a way to make it more suitable for telecasting and creating among the actors the consciousness of acting for a larger audience.

General attitudes regarding television and viewing habits must also be taken into account. Since the industry is accustomed to thinking in terms of audience ratings—though not to the exclusion of all other considerations—efforts are made to assure steady interest. The telecast was made to conform to what was interpreted as the pattern of viewers' expectations. The drama of *MacArthur Day*, in line with that pattern, was nonetheless built around unifying symbols, personalities, and general appeals (rather than issues). But a drama it had to be, even if at the expense of reality.

Unlike other television programs, news and special events features constitute part of that basic information about "reality" which we require in order to act in concert with anonymous but like-minded persons in the political process. Action is guided by the possibilities for success, and, as part of this constant assessment, inferences about public opinion as a whole are constantly made. Even though the average citizen does, in fact, see only a small segment of public opinion, few persons re-

frain from making estimates of the true reading of the public temper. Actions and campaigns are supported by a sense of support from other persons. If not, these others at least constitute an action potential that can be mobilized. The correct evaluation of the public temper is therefore of utmost importance; it enters the total political situation as perhaps one of the weightiest factors.

Where no overt expression of public opinion exists, politicians and citizens find it useful to fabricate it. Against such demonstrations as MacArthur Day, poll data lack persuasiveness and, of necessity, must always lag in their publication behind the development of popular attitudes. For the politician who is retroactively able to counter the errors resulting from an undue regard for what at a given time is considered overwhelming public opinion, there may be little significance in this delay. The imagery of momentary opinion may, however, goad him into action which, though justified in the name of public opinion, may objectively be detrimental. It may prevent critics from speaking out when reasoned criticism is desirable, so that action may be deferred until scientific estimates of public opinion can catch up with the prior emergence of new or submerged opinion.

Above all, a more careful formulation of the relations among public opinion, the mass media, and the political process is vital for the understanding of many problems in the field of politics. The reports and telecasts of what purports to be spontaneous homage paid to a political figure assume added meaning within this context. The most important single media effect coming within the scope of the material relevant to the study of MacArthur Day was the dissemination of an image of overwhelming public sentiment in favor of the General. This effect gathered force as it was incorporated into political strategy, picked up by other media, entered into gossip, and thus came to overshadow immediate reality as it might have been recorded by an observer on the scene. We have labeled this the "landslide effect" because, in view of the widespread dissemination of a particular public welcoming ceremony, the imputed

unanimity gathered tremendous force.⁹ This "landslide effect" can, in large measure, be attributed to television.

Two characteristics of the video event enhanced this effect (misevaluation of public sentiment). (1) The depiction of the ceremonies in unifying rather than in particularistic symbols (between which a balance was maintained) failed to leave any room for dissent. Because no lines were drawn between the conventional and the partisan aspects of the reception, the traditional welcome assumed political significance in the eyes of the public. (2) A general characteristic of the television presentation was that the field of vision of the viewer was enlarged while, at the same time, the context in which these events could be interpreted was less clear. Whereas a participant was able to make direct inferences about the crowd as a whole, being in constant touch with those around him, the television viewer was in the center of the entire crowd. Yet, unlike the participant, he was completely at the mercy of the instrument of his perceptions. He could not test his impressions—could not shove back the shover, inspect bystanders' views, or attempt in any way to affect the ongoing activity. To the participant, on the other hand, the direction of the crowd activity as a whole, regardless of its final goal, still appeared as the interplay of certain peculiarly personal and human forces. Political sentiment, wherever encountered, could thus be evaluated and discounted. Antagonistic views could be attributed to insufficient personal powers of persuasion rather than seen as subjugation to the impersonal dynamics of mass hysteria. The television viewer had little opportunity to recognize this personal dimension in the crowd. What was mediated over the screen was, above all, the general trend and the direction of the event, which consequently assumed the proportion of an impersonal force no longer subject to influence.

⁹ It must be reemphasized that there was no independent check—in the form of a validation—of the specific effect of TV. However, newspaper coverage emphasized the overwhelming enthusiasm. Informal interviews, moreover, even months later, showed that the event was still being interpreted as a display of mass hysteria.

This view of the “overwhelming” effect of public moods and the impersonal logic of public events is hypothesized as a characteristic of the perspective resulting from the general structure of the picture and the context of television viewing.

B. AUDIENCES OF MASS COMMUNICATION

INTRODUCTION

The Nature of an Audience

BAUER'S ARTICLE in the following section is a kind of requiem for a past concept of the mass media audience, a concept that until recently was very much alive. We have spoken in several places about the passing of this concept. Suffice it here to say that mass media audiences are no longer very widely conceived of as relatively passive collections of individuals who interact very little with each other but maintain direct relationships with the media, by which they are directly and most dramatically influenced. As Freidson's article, in the following pages, makes clear, the process and effect of mass communication must be seen today against the background concept of an intensely active audience, seeking what it wants, rejecting far more content than it accepts, interacting both with the members of the groups it belongs to and with the media content it receives, and often testing the mass media message by talking it over with other persons or comparing it with other media content.

The activity of an audience is really a continuum from the most to the least active, depending on the situation. For example, consider this list of communication situations, arranged from the most to the least interactive:

- An argument between two persons
- A group discussion (with people taking turns)
- A mob being stirred up to action
- A football game (in which the audience feels involved, but is constrained in the action it can take)
- A political meeting (perhaps less involving than the football game)
- A class lecture

A movie in a theater (individual attention but some crowd reaction)

Family viewing of television (probably some conversation or criticism)

Reading a newspaper

The mass media experiences are at the lower, less active end of the continuum, and there, obviously, the opportunity for feedback is much less. In an argument, one can instantly argue back—or even hit back. In a class lecture, a student can ask questions or object or leave. In a movie, a viewer can hiss or hoot or applaud loudly enough for the manager to hear. A person viewing television with his family can say what he thinks of a program, or turn off the set, or write or telephone the station. The man of the house, reading the newspaper at the end of the workday, can do little except stop reading, or write a letter to the editor. Many an editor has heard from his audience in the tone of the salutation Charles Dana reported: "Mr. Editor, you cur, sir!"

Thus the opportunity for immediate activity varies greatly according to the kind of audience, but even at the quietest, most individual end of the spectrum, audience activity is not limited by what can be done at once. Let the newspaper endorse the wrong candidate or misreport something that means a great deal to the reader, and if the editor does not get a direct complaint he can at least count on generating a great deal of angry discussion—and perhaps losing subscribers.

In another way, the audience is very active, although there may be nothing overt about it. This is in the selection, rejection, and interpretation that goes on in the mind of every receiver. We have included a number of papers on this topic because of the great power given to the mass media to report to us on our environment. Indeed, much of what we know about everything except our most immediate surroundings comes to us through the mass media, and therefore it is important to know both how the media handle this responsibility and how audiences handle the information delivered to them.

The Sears-Freedman paper reviews the research on the ques-

tion whether audiences select material they agree with, and reject that which they do not. The Krech and Crutchfield chapter is a succinct analysis of how people perceive the messages that come to them from out of their environment. Lippmann's article is on disparities between "the world outside and the pictures in our heads," and how these disparities arise. The Cooper-Jahoda paper reports one of the most famous communication studies of the 1940's—how prejudiced people reinterpret anti-prejudice propaganda to fit their prejudices. The Hastorf-Cantril article is an account of how people who wanted different teams to win saw the same football game. And the article by Tannenbaum is an account of how the media "index" their content (by headlines, captions, position, display, and so forth) and how this affects the message that audiences get from it. It will be clear from these papers that the media are not shooting a bullet into their audiences—or, at least, not the same bullet; and if the same bullet leaves the printing press or the broadcasting tower or the film projector, it is vastly different by the time it comes to rest in different targets.

We have not included here a summary of audience size and composition, because these figures differ considerably with time and place, and are better sought in current reports. It may be helpful, however, to set down a few generalizations.

The mass media are part of a child's environment almost from the beginning of life. Until the child learns to read, the electronic media dominate. Where television is available, a child makes considerable use of it by age two, and almost all children view it by age five. Picture books come into use, radio has limited use (where there is television), comic books and strips and stories are read to the child, and occasionally a young child is taken to a movie. Then, when he learns to read, storybooks and some magazine content come rapidly into use.

A teenager's use of the media reflects the development of new skills, the demands and uncertainties of new social roles, the broadening of knowledge, and the gradual maturing of tastes and interests. Social communication roles (like going to the movies or the library) become more important. He begins to make much use of popular music. School influences both his

interests (more public affairs, more science) and his use of time (homework cuts into mass media time, although he often does the homework with the radio blasting beside him). The newspaper becomes important to him. As he turned to slapstick and fantasy in his early years, so he turns toward the advice column in his teens.

Two media, television and newspapers, are seen by almost all adults in the economically advanced countries of North America, Europe, and Japan. (In developing countries, radio tends to be most used because it can overleap literacy and because low-cost transistor receivers can provide listening where there are no electric power lines). Television is in nearly 95 percent of American homes, and newspapers are read regularly by more than 85 percent of American adults. Magazines reach about two-thirds of the adult population. Somewhat less than half of American adults attend movies with any regularity, and only 25 to 35 percent read as much as one book a month. Radio is still settling into the new role enforced on it by television, and its audience has been changing.

Newspaper reading rises to a peak in the forties and falls off slightly in late years, possibly because of difficulties with vision. Television, on the other hand, seems to pick up even more viewers after fifty. Magazine and book reading decline somewhat through adult life.

More significant than the changing *amount* of use of the different media, however, is the changing *nature* of use during the adult years. People, as they grow older, select more news and information programs on television, read more public affairs content in newspapers, and are more likely to seek "serious" material in magazines and movies. This is a fairly steady pattern from the thirties onward. As the taste for serious information grows, so the interest in comics, popular music, mystery and western programs, and escape fiction declines. People beyond the early years of adulthood make up most of the audience of public television.

The use of print media increases (in general) and the use of television decreases with education. When allowance is made for the amount of free time available (highly educated people

tend to be busy with activities other than media use), then use of the electronic as well as print media appears to also increase with education; but when time is scarce, highly educated people are more likely to seek their information in print than elsewhere.

The current and continuing audience studies are the best place to look for up-to-date information in the area we have been describing so briefly. For a more general treatment, see the article by Schramm, "Mass Communication in the Human Life Cycle," in *Mélanges Roger Clause* (Brussels: Editions de l'Institut de Sociologie, 1971).

ELIOT FREIDSON

*Communications Research
and the Concept of the Mass*

As Freidson says in this article, several different notions of the "mass" have gone into writing and thinking about mass communication. In one sense, the mass is thought of merely as a great body of people—for example, the television audience, or all the inhabitants of a country who do not belong to an elite class. This is not very useful in helping to explain audience behavior. A second notion is that the mass is a large group of individuals who represent all groups in society, who do not know each other and interact little if at all, and who have very little social organization. This concept of the mass invited scholars to study it as individuals and to give equal weight to all individuals by classifying them as to age, sex, socioeconomic status, education, and the like. As a matter of fact, this is how mass media audiences were studied for a number of years. And yet we know that members of the mass do not act solely as individuals. They interact. They belong to groups and defend group norms. They have different degrees of influence and authority. This article was one of the earlier efforts by sociologists to direct communication research away from the study of individuals to a study of an active, interacting audience. Dr. Freidson is a member of the sociology faculty at New York University. This paper was first published, and copyrighted, by the *American Sociological Review*, in 1953, and is here reprinted by permission of the author and the copyright holder.

THE STUDY of mass communications has not interested many sociologists until quite recently. Sociologists who are now working in the field find themselves confronted by a rather large body of research literature created over the past twenty years by such diverse workers as educators, psychologists, librarians, professional consultants to business or government, and the like. Each of the workers has been interested in a special problem, and on the whole those problems have been practical, requiring what is immediately useful for action rather than what is or will be useful for basic knowledge.

That practical orientation has not only been responsible for

the diversity of research but also for a notable lack of the systematic point of view that a theory of mass communication would give. Such a theory could illuminate the area of research better than mere common sense, and by doing so make the application of specific research techniques more appropriate and more accurate.

Such a theory must begin with some definition of the area of concern. While the sociologist is perhaps not the most qualified to deal with the nature of communication itself, he is at least qualified to deal with the nature of human groups. He can participate in the creation of a theory of mass communication by defining the character of the social enterprises that organize, produce, and maintain mass communications and their media, and by defining the character of the human groups called audiences, or collectively, "the audience." In this paper the sociological concept of the mass will be examined to see if it may be used to define the character of the audience of mass communications.

The Concept of the Mass

In the dictionary the mass is defined as the great body of the people of a nation, as contrasted to some special body like a particular social class. Lazarsfeld and Kendall use such a definition when they write, "The term 'mass,' then, is truly applicable to the medium of radio, for it more than the other media, reaches all groups of the population uniformly."¹ This notion of the mass merely implies that a mass communication may be distinguished from other kinds of communication by the fact that it is addressed to a large cross-section of a population rather than only one or a few individuals or a special part of the population. It also makes the implicit assumption of some technical means of transmitting the communication in order that the communication may reach at the same time all the people forming the cross-section of the population.

¹ P. F. Lazarsfeld and P. L. Kendall, "The Communications Behavior of the Average American," in W. Schramm, ed., *Mass Communications* (Urbana: University of Illinois Press, 1949), p. 399.

This is a conception that is not incorrect, but rather inadequate. It does not exploit its own implications about the nature of the behavior we may expect from members of the mass or about the characteristic features of the mass that set it apart from other groups. By its lack of specific system or following out of implications it neither encourages nor requires specific research to contradict or elaborate it.

A second notion of the mass and its behavior is systematic, logical, and specific enough to provide testable hypotheses about the characteristics of the audience of mass communications and the determinants of its behavior. As such, it is eminently suited to be worked into a larger theory of mass communication. In this conception² the mass is said to have four distinctive features. First, it is heterogeneous in composition, its members coming from all groups of a society. Second, it is composed of individuals who do not know each other. Third, the members of the mass are spatially separated from one another and in that sense, at least, cannot interact with one another or exchange experience. Fourth, the mass has no definite leadership and has a very loose organization if any at all. These features are all implied by the commonsense notion and are logically compatible with each other.

The members of the mass are characteristically concerned with ideas, events, and things that lie outside their local experience. Because those ideas, events, and things lie outside the local experience of the members of the mass, they are not defined or explained "in terms of the understanding or rules of (the) local groups" to which the members of the mass belong.³ These therefore turn the attention of the members of the mass away from their "local cultures and spheres of life" and toward areas not structured by "rules, regulations, or expectations." In this sense, the mass "has no social organization, no body of custom and tradition, no established set of rules or rituals, no organized group of sentiments, no structure of status roles, and

² Herbert Blumer, "Collective Behavior," in A. M. Lee ed., *New Outline of the Principles of Sociology*, (New York: Barnes and Noble, 1946), pp. 167-222. Blumer's work rests upon the earlier formulations of Robert E. Park.

³ *Ibid.*, p. 186.

no established leadership. It merely consists of an aggregation of individuals who are separate, detached, anonymous."⁴ Since the mass has no societal character, the form of its behavior is not to be found in organized, concerted group activity but rather in the behavior of the separate individuals who make up the mass. Each individual seeks to gratify his own needs by selecting certain extralocal ideas, events, or things in preference to others.

In another paper Blumer states that the audience of at least one mass medium, the movies, is a mass. In attending to movies, members of the audience are anonymous, heterogeneous, unorganized, and spatially separated, and the content of the movies is concerned with something that lies outside the local lives of the spectators.⁵ According to his notion, then, the audience of such mass communications as we find in movies may be distinguished from other social groups or aggregates by the specific, generic characteristics of the mass.

It is clear that this concept of the mass is sufficiently logical and articulated that if we use it to characterize the audience of mass communications, as Blumer suggests we do, it could well serve as an important source of fruitful hypotheses, and in turn become part of some systematic theory of mass communication. The problem remains, however, whether what we already know about the audience is compatible with the concept of the mass, and in this sense whether or not it would be *accurate* to characterize the audience as a mass. It is to this problem that we must turn now.

The Character of Audience Experience

The major methodological implication of Blumer's conception of the mass is that it is appropriately studied by using a "sample in the form of an aggregation of disparate individuals having equal weight."⁶ The method of study appropriate to

⁴ Ibid.

⁵ Herbert Blumer, "The Moulding of Mass Behavior through the Motion Picture," *Publications of the American Sociological Society* 29 (1936): 115-27.

⁶ Herbert Blumer, "Public Opinion and Public Opinion Polling," *American Sociological Review* 12 (1948): 548. In this article he specifically describes "going to motion picture shows, and reading newspapers" as "mass actions of individu-

the concept thus gives equal weight to individuals by classifying them according to such essentially demographic attributes as age, sex, socioeconomic status, and education; the subjects are treated as solitary individuals who have certain traits in common but who do not interact with each other and who do not share certain socially derived expectations about the communication.

Blumer has indicated that the characteristic behavior of the members of the mass takes the form of *selection*. In this sense, if it is accurate to consider members of the audience to be members of the mass, then their characteristic behavior lies in their selections of particular movies, programs, and newspapers. These selections become the important thing to explain. If it is accurate to consider the audience to be a mass, then according to the concept of the mass those selections are to be explained by factors that are not an essential part of the primary or local group experience of the audience. The factors that reduce the individual to a member of the mass are such things as age, sex, years of education, socioeconomic status, and "personality," attributes that he shares with thousands who are unknown to him and who have no immediate influence on him.

Such attributes must explain audience selections, or we are justified in concluding that the audience is not a mass. Of late there has been some feeling that such data are not sufficient to explain audience selections. Riley and Flowerman advance the opinion that "any given person in the audience reacts not merely as an isolated personality but also as a member of the various groups to which he belongs and with which he communicates."⁷ To support this they offer some preliminary data that cannot be ignored, even though they refer only to an audience of children.

There are in fact other grounds for concluding that the individuals in contrast to organized actions of groups," and attacks public opinion pollers for applying to the study of the public and public opinion methods of sampling that are appropriate only to the study of the mass or other aggregates.

⁷ M. W. Riley and S. H. Flowerman, "Group Relations as a Variable in Communications Research," *American Sociological Review* 16 (1951): 171. See also M. W. Riley and J. W. Riley, Jr., "A Sociological Approach to Communications Research," *Public Opinion Quarterly* 15 (1951): pp. 445-60.

ence is only inaccurately termed a mass. We are told that the mass consists of individual members. When we look at a particular individual member of the audience we find that his actual experience is of a decidedly different quality than might be expected if he were a solitary member of the mass. We find that most individuals go to the movies in the company of another person⁸ and that family rather than solitary listening and watching tend to be characteristic of radio⁹ and television¹⁰ audiences. The individual seems to experience those media frequently in an immediately sociable setting¹¹ that cannot be characterized as anonymous or heterogeneous, with no interaction with other spectators, and no organized relationships among them.

The fact of the existence of a characteristically interpersonal setting of the spectator's contact with some of the mass media would lead us to suspect and seek the existence of other characteristically social features of his experience. When we learn that the most effective mode of stimulating members of the audience to make one selection rather than another (i.e., the most effective mode of advertising) lies in what is called word-of-mouth advertising¹² (i.e., the transmission of opinions about movies from one person to another), it seems certain that there is some lively interchange between any individual and other members of the audience. From this datum we are able to infer among the members of an audience the existence and continuous re-creation of shared understandings, common selections, and concerted social activity. Further, since we are told that such a thing as an "opinion leader" exists,¹³ we may conclude

⁸ L. A. Handel, *Hollywood Looks at Its Audience* (Urbana: University of Illinois Press, 1950), pp. 113-14.

⁹ A. L. Eisenberg, *Children and Radio Programs* (New York: Columbia University Press, 1936), p. 194.

¹⁰ E. E. Maccoby, "Television: Its Impact on School Children," *Public Opinion Quarterly* 15 (1951): 425.

¹¹ Herbert Blumer, *Movies and Conduct* (New York: Macmillan, 1933), passim, is particularly rich in personal documents that indicate the quality and significance of that immediately sociable setting of movie-going.

¹² Handel, *Hollywood Looks at Its Audience*, p. 69.

¹³ *Ibid.*, pp. 88-90. See also the discussion provoked by the "discovery" of the opinion leader, R. K. Merton, "Patterns of Influence," in P. F. Lazarsfeld and

there to be some sort of well-developed web of organized social relationships that exists among members of the audience and that influences their behavior.

This material implies that the member of the audience selects his mass communications content under a good deal of pressure and guidance from his experience as a member of social groups, that in fact his mass communications behavior is part of his social behavior, and that *mass communications have been absorbed into the social life of the local groups*. The act of "selection" itself seems to have become a habitual type of social act that frequently is no longer even self-conscious. Handel indicated that only about 21 percent of the movie audience shows any great effort consciously to select a particular movie to see¹⁴ (rather than go to the Rialto on Saturday nights because that's what one always does on Saturday nights).

Much audience behavior, then, takes place in a complex network of local social activity. Certain times of day, certain days, certain seasons, are the socially appropriate times for engaging in particular activities connected with the various mass media. The individual is frequently accompanied by others of his social group when he is engaged in those activities. The individual participates in an interpersonal grid of spectators who discuss the meaning of past experience with mass communications and the anticipated significance of future experience. Certain theaters, programs, and newspapers tend to form focal points for his activity on specific occasions, no matter what the content might actually be.

F. N. Stanton, *Communications Research* (New York: Harper & Brothers, 1949), pp. 180-219.

¹⁴ Handel, *Hollywood Looks at Its Audience*, pp. 151-54. We may also note Berelson's finding in "What 'Missing the Newspaper' Means," in Lazarsfeld and Stanton, *Communications Research*, pp. 122-23, that "reading (the newspaper) itself, rather than *what* is read, provides an important gratification for the respondents." Radio research, too, has found such habitual rather than consciously selective audience behavior.

In many ways the ordinary member of an audience can be equated with the normal, unself-conscious member of a long-established church congregation, while the fan can be equated with the devoted member of a tightly organized, militant cult. The former shows habitual social behavior while the latter shows ritual social behavior.

The behavior of the members of the mass is said not to be "integral to the routine of local group behavior,"¹⁵ but the communications behavior of the members of the audience, on the other hand, *does* seem to be integrated into the routine of local group life. The mass media are institutions that are organized around providing services to a clientele. The services of the local theater, television station, and newspaper are absorbed into the pattern of local life, becoming only some of a number of focal points around which leisure activities have been organized by the members of the group.

It is this point about the social nature of the experience of the members of the audience that has been somewhat obscurely made by past research when the "predispositions" of the individual are referred to in order to explain the failure to find strong and consistent correlations between content and specific types of reactions to it. It is this point that is being referred to by the recent thorough review of the literature on the effects of mass media that concluded at one point that

a substantial number of careful objective studies indicate that cultural milieu is one of the most important, if not the single most important determiner of an individual's pattern of communications behavior. . . . The individual apparently adopts, or develops, patterns of communications behavior characteristic of persons in his own cultural level. . . . Should he come into contact with a new medium of communication, his behavior in relation thereto is governed *by* the pattern. The new medium is in short not so likely to change the pattern of his behavior as rather to be absorbed.¹⁶

On the basis of this material on the experience and behavior of members of the audience, it is possible to conclude that the audience, from the point of view of its members, at least, is *not* anonymous, heterogeneous, unorganized, and spatially separated. The individual member of the audience frequently does not manifest the selective activity characteristic of the mass, and when such selection has been observed to occur it ap-

¹⁵ Blumer, "Moulding of Mass Behavior," p. 116.

¹⁶ J. T. Klapper, "The Effects of Mass Media." (New York: Bureau of Applied Social Research, Columbia University, 1949); sec. I-15, p. 6.

peared to arise out of the stimulation of organized social processes rather than merely the individual's personal interests. Given this, it is possible to conclude that the concept of the mass is not accurately applicable to the audience.

Methodological Implications

If this conclusion is correct, what are its implications for communications, and particularly audience, research?

The bulk of past students of the audience of mass communications will no doubt be surprised to be told that their method and their underlying assumptions about the nature of the audience presuppose reliance on the concept of the mass that has been described here. There is no justification for studying the audience as an aggregation of discrete individuals whose social experience is equalized and canceled out by allowing only the attributes of age, sex, socioeconomic status, and the like, to represent them except by subscribing to the assertion that the audience is a mass.

Further, the popular procedure of studying audience behavior solely in relation to content also relies on equating the audience with the mass. Assuming the audience to be a mass, the implicit reasoning of such research is as follows. Since the mass attends to areas which are not conventionally defined (and which are in some way conveyed by content), and since members of the mass do not behave according to the conventions, expectations, and values of their local groups and do not interact with each other, it follows that the two really important variables in mass communication are individual traits of the members of the audience and the content itself. Content is then studied as a set of stimuli from which members of the audience *as individuals* create "objects" in terms of their individual interests. There is only interaction between content and personal interests. When the audience is viewed as a social group rather than a mass, then content and personal interests are seen to be only some of the elements of the overall social process determining responses.

To the extent that past research has studied the audience as

if it were composed of discrete individuals, and has sought the significant determinants of audience taste and behavior only in the relation between content and the personal interests implied by the attributes of the individual spectator, past research has considered the audience to be a mass. If the concept of the mass is only inaccurately applied to the audience, the past research that owes its justification to such application has rested on an inaccurate foundation and suffers because of it.

*The Use of the Concept of the Mass
in Communications Research*

In order to create a more adequate notion of the audience, it must be recognized that there is an essential ambiguity¹⁷ involved, an ambiguity that becomes sharply focused when we realize that one can speak of the audience in two major senses. On the one hand we can speak of the *national audience* and on the other of the *local audiences* that make up the national audience.

The national audience is more or less a mass in Blumer's sense, provided that we speak of members of one local audience not in relation to each other but to those of other local audiences. Members of one local audience are anonymous, heterogeneous, spatially separate, and unorganized in relation to those of another local audience. There is no well-organized bond between different local audiences, and in this sense the type of social experience presupposed by such a bond need not be taken into account when one deals with the sum of the local audiences—the national audience. Thus, so long as one treats

¹⁷ Some of the ambiguity of the problem of defining the audience lies in the fact that the audience changes as we change our perspective. To the stubbornly pragmatic producer of movies who relies only on box office receipts for his conception of the audience, it is typically a mass. To the television producer who is strongly affected by a tiny but extremely vocal group of parents who do not want violence portrayed on the screen, the audience is typically a public and his decisions are made on the basis of "public opinion." Our major point here, however, is that if we assume the perspective of the members of the audience as they themselves experience mass media, the audience is a distinctly social, local group that neither typically makes selections nor discusses an issue.

the national audience as an aggregate body, the concept of the mass is not inaccurately applied.

However, while one can *describe* such an aggregate without reference to the organized groups that compose it, one cannot *explain* the behavior of its members except by reference to the local audiences to which they belong. It is their experience as members of local audiences that determines how they act, not the fact that there happen to be members of other local audiences whom they do not know, who are not necessarily similar to them, do not interact with them, and do not have well-organized relationships with them. The existence of those other local audiences has no necessary relation to their own experience. If we are to consider the actual experience of members of the audience to determine their responses, then the concept of the mass has little relevance to that experience and is not appropriately used as the basis for explaining audience behavior. Research concerned with the problem of explaining why members of the audience behave as they do should avoid using the concept at the risk of using inappropriate methods of study and obscuring pertinent facts. This conclusion in no way questions the usefulness of the concept of the mass for other areas of research.

The behavior of members of the audience, in sum, does not seem to conform to the criteria of collective behavior in general; rather, it seems to be distinctly social. Thus, an adequate concept of the audience must include some idea of its social character, some idea that being a member of a local audience is a social activity in which interaction with others before, during, and after any single occasion of spectatorship has created definite shared expectations and predisposing definitions. These in turn have a determinate effect, in conjunction with the institutionalized character of the activity, on what members of the audience select or do not select, and how they react or do not react. Such a concept requires research that is not satisfied with studying only such things as the age, sex, or personality of the spectators in conjunction with the content of the communication, but that would go on to study the local audi-

ence itself as a social group composed of individuals who have absorbed mass communications into their relatively settled ways of behaving and who, in the real or vicarious company of their fellows, behave towards mass communications in an organized, social manner.

DAVID O. SEARS AND
JONATHAN L. FREEDMAN

*Selective Exposure to Information:
A Critical Review*

Do individuals select from the mass media what they agree with? Intuitively, this seems to make sense. We know that a program put on by one political party is more likely to attract audiences from that party than from others. We know that in general we try to select from the media what we think will be useful to us or what we expect to enjoy. The theory of cognitive dissonance tells us that we are likely to look for information that confirms rather than challenges a decision we have made. This is important, because if audiences select chiefly the media content that they are predisposed to agree with, then there is good reason to expect that many campaigns will fail and that the media will not be very effective in persuasion. Sears and Freedman have reviewed the research on selective exposure, and they conclude that the situation is not as simple as it seems. There is evidence of de facto selection—for example, more Republicans than Democrats listening to the Republican broadcast—but no very convincing evidence of a general psychological preference for supportive material. Their analysis of these conclusions illuminates both the need and the difficulty of studying the communication process. Dr. Sears is a member of the psychology department at the University of California, Los Angeles, and Dr. Freedman, of the psychology department at Columbia. This article was originally printed and copyrighted by the *Public Opinion Quarterly* in 1967, and is reprinted here by permission of the authors and the copyright holder.

ONE OF THE most widely accepted principles in sociology and social psychology is the principle of selective exposure. It is a basic fact in the thinking of many social scientists about communication effects. For example, Lazarsfeld, Berelson, and Gaudet find it an indispensable link in their explanation of why a political campaign mainly activates and reinforces pre-

existing preferences or predispositions.¹ Hyman and Sheatsley² and Klapper³ make the more general point: information campaigns, and mass communications of any kind, rarely have important persuasive impact because, among other things, of selective exposure. In Festinger's very influential cognitive dissonance theory, selective exposure plays a central role as a prime mechanism for dissonance reduction.⁴ McGuire based an extensive program of research on immunization against persuasion on the assumption that people are often quite unacquainted with counterpropaganda, because of selective exposure.⁵ Experimental psychologists and survey researchers alike agree that laboratory and field studies of mass communications often come to quite different conclusions because, in large part, of selective exposure.⁶ So the theme of selective exposure runs through much of the research on attitudes and communication of the past two decades.

Nevertheless, the empirical literature on selective exposure has been rather unsatisfying. Partly this is because the term itself has been used in a confusing way. The observation of an empirical correlation between attitudes and exposure has rarely been distinguished from an active psychological preference for supportive information, although they clearly may be quite different. Perhaps more important, a substantial amount of research has been done in the last decade relating to these two

¹ P. F. Lazarsfeld, B. Berelson, and Hazel Gaudet, *The People's Choice*, 2nd ed. (New York: Columbia University Press, 1948).

² H. H. Hyman and P. B. Sheatsley, "Some Reasons Why Information Campaigns Fail," *Public Opinion Quarterly* 11 (1947): 413-23.

³ J. T. Klapper, *The Effects of Mass Communication* (Glencoe, Ill.: The Free Press, 1960).

⁴ L. Festinger, *A Theory of Cognitive Dissonance* (Evanston, Ill.: Row, Peterson, 1957).

⁵ W. J. McGuire, "Inducing Resistance to Persuasion: Some Contemporary Approaches," in L. Berkowitz, ed., *Advances in Experimental Social Psychology*, vol. 1 (New York: Academic Press, 1964).

⁶ C. I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," *American Psychologist* 14 (1959): 8-17; S. M. Lipset, P. F. Lazarsfeld, A. Barton, and J. Linz, "The Psychology of Voting: An Analysis of Political Behavior," in G. Lindzey, ed., *Handbook of Social Psychology*, vol. 2 (Cambridge, Mass.: Addison-Wesley, 1954).

questions, and the results are not as unequivocal as one might expect.⁷ Under these circumstances, a thorough review and assessment of this research would appear to be in order. The purpose of this paper is, therefore, first to clarify what is meant by *selective exposure*, then to characterize the evidence leading to its use, and finally to evaluate the evidence regarding whether or not there is a psychological tendency to prefer supportive to nonsupportive information.

Definition

First, what is meant by *selective exposure*? How is the term generally used?

Any systematic bias in audience composition. Sometimes it is used to describe any bias whatever in the composition of a communication audience, as long as the bias can be correlated with anything unusual in communication content. So, when the audience for educational broadcasts on the radio is disproportionately composed of highly educated persons, selective or "partisan" exposure is said to be present. The same is said when broadcasts about a particular ethnic group reach more members of that group than would be expected by chance.⁸

Perhaps the most general statement has been made by Berelson and Steiner in their redoubtable collection of propositions about human behavior: "People tend to see and hear communications that are favorable or congenial to their predispositions; they are more likely to see and hear congenial communications than neutral or hostile ones." The predispositions referred to include "sex role, educational status, interest and involvement, ethnic status, political attitude, aesthetic position,

⁷ Several other writers have commented upon this in passing. See D. Papageorgis and W. J. McGuire, "The Generality of Immunity to Persuasion Produced by Pre-exposure to Weakened Counterarguments," *Journal of Abnormal and Social Psychology* 62 (1961): 475-81; I. D. Steiner, "Receptivity to Supportive versus Nonsupportive Communications," *Journal of Abnormal and Social Psychology* 65 (1962): 266-67; and J. W. Brehm and A. R. Cohen, *Explorations in Cognitive Dissonance* (New York: Wiley, 1962).

⁸ Lazarsfeld et al., *The People's Choice*, p. 166.

and, indeed, any way of characterising people that matters to them." ⁹ Expressed in this form, the selective exposure hypothesis offers no explanation for *why* audiences are biased. The only assertion is that they are biased, and are biased systematically along dimensions that parallel salient aspects of the communication or attributes of the communicator. In this form, the proposition is perhaps too general to be of much use.

Unusual agreement about a matter of opinion. The most common and perhaps most interesting application of the previous definition has to do with matters of opinion. *Selectivity* describes audience bias in the direction of agreeing to an unusual extent with the communicator's stand on an issue relevant to the communication. Lazarsfeld et al. put it this way: "Exposure is always selective; in other words, a positive relationship exists between people's opinions and what they choose to listen to or read." ¹⁰ Lipset et al. later said that "most people expose themselves, most of the time, to the kind of propaganda with which they agree to begin with." ¹¹ Klapper summarized the point this way: "By and large, people tend to expose themselves to those mass communications which are in accord with their existing attitudes." ¹² Childs concludes: "Innumerable studies show that readers tend to read what they agree with, approve, or like." ¹³ These are simply descriptive statements; they only assert that communication audiences usually share, to an extraordinary degree, the viewpoints of the communicator. These statements again are noncommittal with respect to the *cause* of this bias. For that reason, this form of the selective exposure hypothesis will be referred to below as *de facto selectivity*.

Preference for supportive, rather than nonsupportive, information. The strongest form of the selective exposure proposition is that people prefer exposure to communications that agree with their preexisting opinions. Hence people are

⁹ B. Berelson and G. A. Steiner, *Human Behavior* (New York: Harcourt, Brace & World, 1964), pp. 529-30.

¹⁰ Lazarsfeld et al., *The People's Choice*, p. 164.

¹¹ Lipset et al., *The Psychology of Voting*, p. 1158.

¹² Klapper, *The Effects of Mass Communications*, p. 19.

¹³ H. L. Childs, *Public Opinion* (Princeton, N.J.: Van Nostrand, 1965).

thought actively to seek out material that supports their opinions, and actively to avoid material that challenges them. Lazarsfeld et al. hypothesized: "It is likely that a desire for reinforcement of one's own point of view exists." Two decades later, the hypothesis had been confirmed: "Although self-selection of exposure in line with predispositions is mainly conscious and deliberate, it can also operate nonconsciously as well."¹⁴ And the Behavioral Sciences Subpanel of the President's Science Advisory Committee felt the proposition was sufficiently well documented to be included in the corpus of established social science fact: ". . . individuals engage in selective exposure. . . . If a new piece of information would weaken the existing structure of their ideas and emotions, it will be shunned . . . if it reinforces the structure, it will be sought out. . . ." ¹⁵ In this form, then, the cause of *de facto* selectivity is quite explicit. People expose themselves to communications with which they already agree and do not expose themselves to those with which they disagree, because they actively seek the former and actively avoid the latter. Why? Presumably because of a general psychological preference for compatible information.

Since the focus of this paper is upon opinions and attitudes, the first and most general of these definitions will not be discussed. Let us then consider the evidence for selective exposure in these latter two senses. For consistency of usage, they will be referred to as *de facto selectivity* and *selective exposure*, respectively, in the remainder of the paper.

De Facto Selectivity

Biases in the composition of voluntary audiences to mass communications have been reported often in survey studies. Often these biases parallel the opinion dimension emphasized by the communicator, and are in the direction of unusual initial agreement between audience and communicator. A typical

¹⁴ Berelson and Steiner. *Human Behavior*, p. 530.

¹⁵ Behavioral Sciences Subpanel, President's Science Advisory Committee. "Report to the President," *Behavioral Science* 7 (1962): 277.

example is Senator William Knowland's telethon in the 1958 California gubernatorial election. Interviews with voters immediately after the election revealed that twice as many Republicans as Democrats (proportionately) had seen this Republican candidate's program. Thirty percent more viewers watched the program in Republican homes than in Democratic homes, and the average Republican viewer watched the program for about an hour longer than did the average Democratic viewer.¹⁶

Mass meetings also seem to attract biased audiences. A typical example is the audience of the Christian Anti-Communism Crusade School held in Oakland, California, in 1962. The Crusade is largely organized and run by white Protestants of a conservative political persuasion. And those who attended the school were over three times as likely to think the internal Communist threat to be "a very great danger" as a national sample of citizens asked the same question. Republicans were also heavily overrepresented: 66 percent were Republicans and 8 percent identified themselves as Democrats.¹⁷

Extended propaganda campaigns seem to elicit de facto selectivity as well. The classic finding is Lazarsfeld et al.'s: of those respondents with constant voting intentions from May to October, about two-thirds were exposed predominantly to propaganda favoring their side, and less than one-fourth mainly to propaganda favoring the other side. Similarly, in a study done on the University of California loyalty oath controversy, Lipset found newspaper-reading habits to be systematically related to general liberalism or conservatism, party preference, and attitudes toward the controversy. Students tended to read newspapers whose editorial policy was closest to their own opinions.¹⁸ And in a somewhat different realm, Ehrlich et al. found that

¹⁶ W. Schramm and R. F. Carter, "Effectiveness of a Political Telethon," *Public Opinion Quarterly* 23 (1959): 121-26.

¹⁷ R. E. Wolfinger, Barbara K. Wolfinger, K. Prewitt, and Sheila Rosenhack, "The Clientele of the Christian Anti-Communism Crusade," in D. E. Apter, ed., *Ideology and Discontent* (Glencoe, Ill.: The Free Press, 1964). These authors do not discuss selective exposure per se, but the data are relevant in the present context.

¹⁸ S. M. Lipset, "Opinion Formation in a Crisis Situation," *Public Opinion Quarterly* 17 (1953): 20-46.

people, whether or not they had just bought new cars, had read a higher percentage of the available ads about their own makes than about any other make.¹⁹

Each of these demonstrations shares a common basis: the correlation of positions on an attitude dimension with an act, or a series of acts, of exposure to mass communications. A causal relationship has often been inferred from these correlations, although they do not permit it to be determined in any rigorous sense, of course. Data collected in experimental situations are more appropriate for that end, and will be discussed later. Yet, for it to be likely that attitudes are an important cause of selective exposure, two criteria must be met by correlational studies: (1) The correlation must be well documented. It should hold, fairly unequivocally, in most cases. (2) Attitudes should be better predictors of (i.e., correlate more highly with) exposure than other variables. These studies should be evaluated with respect to these two criteria, for if they fall short, the causal role of attitudes seems likely to be modest.

Strength and generality of the effect. It is not appropriate to review all studies yielding de facto selectivity, since the only point here is to see whether or not it has been established beyond much doubt. Let us consider the strength of the effect as it appears in the classic study by Lazarsfeld, Berelson, and Gaudet, since it is almost always cited as representative. They indeed found that their respondents had been exposed predominantly to propaganda supporting their predispositions. A breakdown into parties, however, reveals the fact that this finding held only for persons with Republican predispositions. Far from being selectively exposed, those with Democratic predispositions were almost evenly divided, 50.4 percent being exposed primarily to Democratic propaganda, and 49.6 percent primarily to Republican propaganda.²⁰ Thus only the Republicans appear actually to have been selective.

However, if one considers the relative availability of pro-Re-

¹⁹ Danuta Ehrlich, I. Guttman, P. Schonbach, and J. Mills, "Post-Decision Exposure to Relevant Information," *Journal of Abnormal and Social Psychology* 54 (1957): 98-102.

²⁰ Lazarsfeld et al., *The People's Choice*, p. 96.

publican and pro-Democratic propaganda, the finding becomes even more paradoxical. Actually, 68.8 percent of the available partisan propaganda in the campaign was pro-Republican.²¹ It is thus hardly surprising that 69.7 percent of those with Republican predispositions were exposed primarily to pro-Republican information, and 30.3 percent primarily to pro-Democratic publicity.²² The exposure of those with Republican predispositions almost exactly matched the partisan division of available information. In fact, looked at from this point of view, it was the Democrats who were selectively exposed, even though actually exposed to equal amounts of Democratic and Republican propaganda, since they were exposed to considerably more Democratic propaganda than might have been expected by chance. And in the later Elmira study one finds a similar pattern: the Republicans' exposure was only 54 percent pro-Dewey, not up to the considerable pro-Republican margin in available information. The Democrats' exposure was 57 percent pro-Truman, despite the rarity of pro-Democratic items in the media.²³ So it is obvious that even in these well-designed studies the effect does not clearly hold for both sets of partisans.

Measurement problems. Even so, many reports of de facto selectivity may well overestimate the magnitude of the effect because of the kinds of measures used. Perhaps the most obvious problem is that only one interview has been used in most studies. If, in this interview, attitudes and exposure favor the same side of an issue, the interpretation is ambiguous: the congruence may reflect either attitude change or de facto selectivity.²⁴

²¹ *Ibid.*, p. 111.

²² *Ibid.*, p. 96. The Republican "constant partisans" were slightly more selective than would be expected from availability alone, while late-deciding Republicans were slightly less so. Constant and late-deciding Democrats alike were exposed to more supportive propaganda than would be expected from availability (*ibid.*, pp. 82, 164). These percentages all exclude respondents exposed equally to both sides, and exclude neutral propaganda.

²³ B. R. Berelson, P. F. Lazarsfeld, and W. N. McPhee, *Voting: A Study of Opinion Formation in a Presidential Election* (Chicago: University of Chicago Press, 1954), p. 245.

²⁴ Raymond and Alice Bauer take a strong position on this point. In the absence of any other information, they say, one must interpret any such correla-

It is not ambiguous, of course, when the attitude or preference has been unequivocally proven to antedate the opportunities for exposure, as, for instance, when the respondent is known to have bought a particular car before the specific ads in question appeared, or in panel studies. However, most studies do not allow this, and must simply hope the respondent is recalling accurately, ignore the possibility of attitude change altogether, or try to argue it away. None of these is a substitute for an advance measure, and each one maximizes the probability of obtaining de facto selectivity, since any attitude change is likely to reduce the discrepancy between communication and respondent's position, rather than increase it.

Second, almost all studies have depended upon retrospective self-reports of exposure, rather than direct and immediate observation of it. It is not possible to say with any certainty what kind of bias this may introduce (owing to selective memory, selective reporting, etc.), but it does seem highly likely to be a systematic bias in any given study. This shortcoming is, of course, a much more difficult one to remedy.

Alternative predictors. Two general possibilities arise when we consider whether other variables are better predictors of selectivity than attitudes. One is relatively straightforward: sometimes other variables simply are more strongly correlated with selectivity than are political or social attitudes. This raises the question of which is the more likely causal agent. The second possibility is that other variables, themselves associated with differences in *absolute* rates of exposure, have artifactually produced de facto selectivity.

As an illustration of the first possibility, let us consider a case in which the communications are expressly ideological, and in which one would thus think exposure to be unequivocally determined by ideological preferences. Those attending the Christian Anti-Communist Crusade were indeed unrepresentative ideologically, but also, as it happened, religiously (only one-third as many Catholics as in the Bay area generally), ra-

tions as "a result of *selective exposure*, rather than evidence for the effects of communications." See their "America, Mass Society, and Mass Media," *Journal of Social Issues* 16 (1960): 29.

cially (no nonwhites in the sample at all, as opposed to 12 percent in the Bay area generally), educationally (52 percent were college graduates, as opposed to 13 percent in the Bay area), and so on.²⁵ Clearly, the school was an upper-middle-class WASP affair. Political conservatism predicted attendance rather well, but then so did a variety of other background variables. In fact, a substantial number of Crusaders ascribed their own attendance to church influence. So it may be quite arbitrary to give ideology the major credit for exposure, even in this seemingly obvious case.

To illustrate the second possibility, consider the variable that predicts differences in absolute rates of exposure to public affairs communications most powerfully, years of education. Now, clearly, *de facto* selectivity effects could be obtained with any issue about which highly educated people generally disagree with poorly educated people, if we consider only propaganda favorable to the former's position. There are numerous positions of this kind: pro-civil liberties, pro-civil rights, and internationalist positions are (at present) positively related to years of education. So, naturally, pro-civil liberties, pro-civil rights, and pro-internationalism propaganda reaches mainly those sympathetic to it. A typical example is the massive pro-UN campaign in Cincinnati in 1947-48. As usual, those who had favored the UN at the beginning of the campaign turned out to have received most of the pro-UN propaganda. It was therefore concluded that, "if there was an increase in exposure [during the campaign], *it was their previous orientation [i.e., attitude toward the UN] which determined the extent to which people exposed themselves to further information about the United Nations*" (our emphasis).²⁶ But the best way to be exposed to the campaign was to go to church, attend service club and PTA meetings, be a regular newspaper reader, have the radio on most of the time, and talk to one's children about

²⁵ Wolfinger et al., "The Clientele of the Christian Anti-Communist Crusade."

²⁶ Shirley A. Star and Helen M. Hughes, "Report of an Educational Campaign: The Cincinnati Plan for the United Nations," *American Journal of Sociology* 55 (1950): 398.

what had happened in school. Thus, not surprisingly, college-educated persons were exposed to the campaign at a rate *four times* that of grammar-school-educated persons. These are all things that well-educated people are likely to do more than poorly educated people, regardless of how they feel about the United Nations. So exposure to the campaign is at least as well predicted by education as by internationalist attitudes, and education seems to be the more likely predictor.

Thus many reports of de facto selective exposure may represent little more than cases in which highly educated persons, who normally are overrepresented in any audience for public affairs presentations, also share a common set of political, social, and/or economic attitudes. Star and Hughes are clearly on solid ground in recommending that information campaigns be directed especially at "women, the relatively uneducated, the elderly, and the poor," since they are normally least likely to be reached.²⁷ However, low rates of exposure of such population groups must be distinguished from alleged avoidance of information because of discrepant beliefs.²⁸

Conclusion. So, on several grounds, published reports of de facto selectivity fall somewhat short of representing ideal proof that people do in fact "tend to expose themselves to those mass communications which are in accord with their existing attitudes." Often it has not been established that these attitudes actually did exist beforehand, and often it is not entirely clear what the pattern of exposure actually was. The magnitude of the effect seems rather small, or limited to one set of partisans in some cases. And allegedly selective information-seekers often cannot be distinguished from promiscuous information-gatherers, because it is not clear that they have both high rates of ex-

²⁷ *Ibid.*, p. 397.

²⁸ In fact, sometimes well-educated groups expose themselves to discrepant propaganda even more than groups who should agree with it. Lazarsfeld reports that the "high" socioeconomic class listened to two of the most important New Deal speeches at a rate better than 50 percent greater than the "low" class. It seems unlikely that this great interest among "high"-class listeners arose because they generally agreed so much with the two speakers, Franklin Roosevelt and Hugo Black. (P. F. Lazarsfeld, *Radio and the Printed Page*, New York: Duell, Sloan, and Pearce, 1940, pp. 26-28.)

posure to friendly propaganda and low rates of exposure to hostile propaganda. Finally, "existing attitudes" often represent only one of several variables that correlate highly with exposure, and their selection as the best predictor may be unnecessarily arbitrary.

Nevertheless, it still seems likely that *de facto* selectivity holds, as a descriptive generalization, on many occasions and for many people. Clearly, demonstrations of the effect have been considerably less conclusive than one might think. But even if it had been clearly demonstrated, it would not indicate that people prefer exposure to supportive information, although that would be a very natural implication. So the next step is to examine the evidence for selective exposure defined in the third sense cited above.

*Is There a General Psychological Preference
for Supportive Information?*

If a person is given a choice between supportive and nonsupportive information, will he prefer exposure to the former, all other things being equal? This is the crucial question, and there is a considerable amount of research bearing on it. The typical procedure has been to measure a subject's opinion on an issue and then determine which of several communications on the issue he would like to read or hear. The opinions have ranged from firmly established ones, such as political preferences and ideas about child development, to those probably adopted for the first time during the experiment itself, such as preferences between verdicts in mock murder trials or essay and multiple-choice examinations. The communications have been, most often, written articles offered in a way that clearly communicates their positions on the issue. However, the choice has sometimes been between oral presentations; sometimes actual exposure, rather than stated preferences, has been measured. The appropriate dependent variable, in all cases, is a measure of interest in supportive information relative to interest in nonsupportive information. *Supportive* information is usually defined simply as the communicator's taking the same

general position as the subject, and *nonsupportive* as his taking the opposite position.

Preference for supportive information. A clear preference for supportive information was obtained in two studies. In one, persons who had recently bought a car were shown eight envelopes allegedly containing advertisements for different brands of cars, and asked to indicate which two they would most like to read. Over 80 percent of the respondents chose an envelope containing ads for their own car (presumably supportive of their purchase), as contrasted with the chance figure of 25 percent. The difference is highly significant.²⁹

Freedman and Sears gave California citizens a choice among several pamphlets on the two candidates in the 1962 gubernatorial contest. Considering only those subjects who selected a partisan pamphlet as their first choice, 58 percent chose one favoring their candidate. This, too, was significantly greater than chance (50 percent).³⁰

In both these studies it was possible to control for any special attractiveness of one alternative, because subjects holding various positions were tested. In a third study this was not possible, so the results are equivocal. Adams gave mothers of young children a choice between two speeches to be given later at a local university—one supporting the hereditary theory of child development, the other supporting an environmental position. The speech conforming to their own initial opinions was selected by 75.9 percent of the mothers, significantly greater than chance.³¹ Unfortunately, 94 percent of the mothers expressed a pro-environmental view, and the few pro-heredity mothers were not considered in the analysis, thus confounding preference with initial position. A pro-environment speech would seem to be more useful and intrinsically interesting, regardless of whether or not one agreed with it: information on how environment shapes behavior is often useful to the mother

²⁹ Ehrlich et al., "Post-Decision Exposure to Relevant Information."

³⁰ J. L. Freedman and D. O. Sears, "Voters' Preferences among Types of Information," *American Psychologist* 18 (1963): 375 (abstract).

³¹ J. S. Adams, "Reduction of Cognitive Dissonance by Seeking Consonant Information," *Journal of Abnormal and Social Psychology* 62 (1961): 74-78.

of a young child, while information on the genes' impact may not be quite so timely. So, in the absence of pro-heredity subjects, it is not possible to assess whether the obtained preference for the environmental talk was due to its universal attractiveness or to its supportiveness.

The results of two other studies are even more difficult to interpret. Mills, Aronson, and Robinson gave students a choice between taking a multiple-choice exam or an essay exam, and then asked them to rank their interest in various articles favorable or unfavorable to the two kinds of exams. Some subjects were given a choice among positively oriented articles, and these subjects significantly preferred those favorable to the chosen exam. Others chose among negatively oriented articles, and these subjects slightly (not significantly) preferred articles unfavorable to the chosen exam.³² In other words, supportive information was preferred among the former subjects, nonsupportive slightly preferred among the latter.

Rosen's attempt at replication of this study raises an important question about even these rather equivocal results. One would think that the most relevant belief to the student's choice of exam is his estimate of which one will give him the better grade. Thus, to support this belief, an article should argue that the chosen exam will give him the better mark, and, to challenge it, an article should take the position that he would have done better on the kind of test he did not choose. In fact, the article titles used by Mills et al. dealt with matters such as the difficulty of the tests and how much anxiety they usually aroused, and not on how well the subject would do relative to the rest of the class. It is therefore doubtful that any of the articles were supportive or nonsupportive in any meaningful sense. Rosen therefore improved the design by including two such articles. These suggested that the subject had made the wrong choice, e.g., "These authors present some evidence that students who prefer essay exams generally do a lot better on objective tests." Clearly, this title is nonsupportive for those who chose essay exams.

³² J. Mills, E. Aronson, and H. Robinson, "Selectivity in Exposure to Information," *Journal of Abnormal and Social Psychology* 59 (1959): 250-53.

Rosen's findings are both striking and odd. Considering all article titles, the subjects significantly preferred information favorable to the chosen exam. But 67 percent of the subjects preferred the clearly nonsupportive new title to the other new title!³³ This certainly conflicts with the overall result of the study. And the two studies, considered together, provide evidence of about every kind: with positive articles, subjects prefer supportive information; with negative articles, they have no preference; and with titles advocating reversal of choice (and thus clearly differing in supportiveness), they strongly prefer nonsupportive information.

No preference. A series of experiments show no preference between supportive and nonsupportive information. In two separate studies, Feather found that neither smokers nor non-smokers had any significant preference between an article suggesting that smoking causes lung cancer and one arguing that smoking does not cause lung cancer. Similarly, Mills and Ross obtained opinions on the use of television as an educational tool, and then asked the subjects to indicate their interest in reading articles for and against their position. In none of a variety of experimental conditions was there any significant preference for either supportive or nonsupportive articles. And Jecker told subjects they would play a competitive game in cooperation with a partner, and then measured the time devoted to reading favorable and unfavorable information about the partner. Exposure times for the two kinds of information did not differ, regardless of whether the subject had already chosen the partner, was about to choose the partner, or was only given limited choice in the matter.³⁴

In three other studies, each subject read excerpts from a

³³ S. Rosen, "Post-Decision Affinity for Incompatible Information," *Journal of Abnormal and Social Psychology* 63 (1961): 188-90.

³⁴ N. T. Feather, "Cigarette Smoking and Lung Cancer: A Study of Cognitive Dissonance," *Australian Journal of Psychology* 14 (1962): 55-64 and "Cognitive Dissonance, Sensitivity, and Evaluation," *Journal of Abnormal and Social Psychology* 66 (1963): 157-63; J. Mills and A. Ross, "Effects of Commitment and Certainty upon Interest in Supporting Information," *Journal of Abnormal and Social Psychology* 68 (1964): 552-55; J. D. Jecker, "Selective Exposure to New Information," in L. Festinger, *Conflict, Decision, and Dissonance* (Stanford: Stanford University Press, 1964).

(fictitious) murder-trial transcript and gave his verdict. He then indicated his preferences among several articles dealing with the case, two of which were pro-acquittal and two pro-conviction. Considering only these four articles, Sears found that exactly 50 percent of the subjects preferred an article supporting their votes; Sears and Freedman found that 45.4 percent preferred a supportive article; and the figure for the third study was 43.1 percent. In the three studies combined, 46.1 percent ($N=317$) ranked a supportive article first. This slight preference for nonsupportive information is not significant, nor do the percentages for the individual studies differ significantly from chance (50 percent in each case). Furthermore, actual exposure was measured in the last two of these studies. Each subject was given either a supportive or a nonsupportive communication to read, and the length of time he spent reading it was recorded. In the first study, subjects spent more time reading nonsupportive articles than supportive, but in the second study there was no difference between the two types of articles.³⁵

Thus, several studies demonstrate no preference between supportive and nonsupportive information. It might be argued, however, that the jury situation, in particular, is not ideal for obtaining selective exposure effects, owing to natural pressures on jurors toward impartiality and fairness. Although it would be pleasant to believe that people suddenly become impartial, fair, and objective when they become jurors, it seems quite implausible. Other data collected in these experiments indicated that the subjects reacted in a highly partisan manner to the communications they actually read: they evaluated the supportive communication much more favorably than its nonsupportive counterpart in each experiment, regardless of which verdict they had supported. So partisanship was not absent, but it

³⁵ D. O. Sears, "Opinion Formation and Information Preferences in an Adversary Situation," *Journal of Experimental Social Psychology* 2 (1966): 130-42; D. O. Sears and J. L. Freedman, "Commitment, Information Utility, and Selective Exposure," *USN Technical Reports*, no. 12 (August 1963); D. O. Sears and J. L. Freedman, "The Effects of Expected Familiarity with Arguments upon Opinion Change and Selective Exposure," *Journal of Personality and Social Psychology* 2 (1965): 420-26.

operated on information evaluation rather than on information selection.

Preference for nonsupportive information. In one of the studies described above there was actually some indication of a preference for *nonsupportive* information: Rosen obtained a general preference for the nonsupportive choice-reversal article. Several other studies have produced quite convincing evidence of a preference for nonsupportive information.

In Brodbeck's study, subjects in groups of eight were led to believe that the group as a whole was evenly divided on the issue of wire-tapping. Then each subject chose the group member whose opinions on wire-tapping she would most like to hear. By chance 42.9 percent of the subjects would have been expected to choose someone they agreed with, but only 20.2 percent did so. That is, they strongly tended to choose someone with whom they disagreed; presumably they preferred to hear nonsupportive information.³⁶

Feather's results were described above only for smokers as a group and for nonsmokers as a group, without considering the most relevant belief involved: is there convincing evidence that smoking leads to lung cancer? In the first of these studies, Feather divided each group into those who believed there was convincing evidence for the relationship and those who believed the evidence was not very convincing. Smokers of both kinds preferred the article *contradicting* their beliefs, while nonsmokers showed no particular exposure preference, regardless of their position. Hence, this again is evidence of preference for nonsupportive information, in subjects who were presumably highly ego-involved about an important issue.³⁷

In two final studies, the subjects' opinions were experimentally manipulated. Sears gave subjects brief synopses of the testimony at murder trials. The content of the evidence was varied only slightly, but crucially, so that all subjects read very similar cases, but generally emerged with different verdict

³⁶ May Brodbeck, "The Role of Small Groups in Mediating the Effects of Propaganda," *Journal of Abnormal and Social Psychology* 52 (1956): 166-70.

³⁷ Feather, "Cigarette Smoking and Lung Cancer."

preferences. They then were offered either the defense or the prosecution summation. Of those given "guilty" cases, 31.2 percent preferred the supportive summation; of those given "innocent" cases, 27.3 percent preferred the supportive summation. Both differ significantly from chance (50 percent), so this study, too, records a clear preference for nonsupportive information.³⁸

Even more dramatic is Freedman's study. Subjects listened to a (fictitious) interview between a candidate for an overseas conference and the person in charge of the conference. For some subjects, the candidate was made to sound very good; for others, very bad. After each subject evaluated the candidate, he was offered a choice between two additional evaluations of the candidate by people who supposedly knew him well, one of which was described as very favorable, and the other as very unfavorable. Only eighteen subjects were run because the results were so consistent and striking. Only one subject chose the evaluation that agreed with his own, and seventeen chose the nonsupportive evaluation.³⁹

Conclusions. By now it must be clear that there is no consistent result in this research. Five studies showed some preference for supportive information: Ehrlich et al. (1957), Freedman and Sears (1963), Adams (1961), Mills et al. (positive

³⁸ D. O. Sears, "Biased Indoctrination and Selectivity of Exposure to New Information," *Sociometry* 28 (1965): 363-76.

³⁹ J. L. Freedman, "Preference for Dissonant Information," *Journal of Personality and Social Psychology* 2 (1965a): 287-89. Four additional articles have appeared since the completion of this paper. Brock found that smokers preferred supportive information on lung cancer more than did nonsmokers, but did not avoid nonsupportive information to any greater extent (T. C. Brock, "Commitment to Exposure as a Determinant of Information Receptivity," *Journal of Personality and Social Psychology* 2 (1965): 10-19). In only one of three experiments does Mills report respondents in a market-research situation seeking supportive information, but in all three he reports avoidance of dissonant information (J. Mills, "Avoidance of Dissonant Information," *Journal of Personality and Social Psychology* 2 (1965): 589-93, and "Effect of Certainty about a Decision upon Postdecision Exposure to Consonant and Dissonant Information," *Journal of Personality and Social Psychology* 2 (1965): 749-52). Finally, in a study done in the 1964 presidential election, apparently supportive information was not significantly sought nor nonsupportive information significantly avoided (R. J. Rhine, "The 1964 Presidential Election and Curves of Information Seeking and Avoiding," *Journal of Personality and Social Psychology* 3 (1967): 416-23). So the evidence continues to be highly inconclusive.

articles) (1961), and Rosen (positive articles) (1961). Eight showed no preference: Mills et al. (negative articles) (1959), Feather (nonsmokers only) (1962), Feather (1963), Mills and Ross (1964), Jecker (1964), Sears (1966), and Sears and Freedman (1963 and 1965). And five showed a preference for non-supportive information: Rosen (choice-reversal articles) (1961), Brodbeck (1956), Feather (smokers only) (1962), Sears (1965), and Freedman (1965a). The conclusion seems clear. The available evidence fails to indicate the presence of a general preference for supportive information.

Cognitive Dissonance and Selective Exposure

Even if there is no general preference one way or the other, there must be conditions under which supportive information will be preferred. The most concrete specification of what these conditions might be has been made within the context of cognitive dissonance theory. Two specific hypotheses have been offered, each based on the assumption that dissonance may be reduced or avoided by selectivity in information-seeking. One is that selectivity increases following a decision or a commitment to do something, and the other is that selectivity increases following involuntary exposure to nonsupportive information. Several studies have been done to test these hypotheses, each based essentially on a comparison between a high-dissonance condition and a low-dissonance condition. Since these studies have been reviewed intensively elsewhere, it is not necessary to go into detail about them here. It is enough to say that the results are again equivocal. Of the five studies specifically designed to test the first hypothesis, only one, a survey study, offers even a marginally significant difference in selectivity between high- and low-dissonance conditions. None of the three studies testing the second hypothesis provides a significant difference between two such conditions.⁴⁰

A third hypothesis has been offered more recently, that selec-

⁴⁰ For a review of these studies, see J. L. Freedman and D. O. Sears, "Selective Exposure," in L. Berkowitz, ed., *Advances in Experimental Social Psychology*, vol. 2 (New York: Academic Press, 1965).

tivity is inversely related to the amount of confidence a person has in his initial opinion. Two studies are directly relevant to this hypothesis. The first supported it, while the second, an attempt at an exact replication of the first, yielded no favorable evidence.⁴¹

Thus the use of dissonance theory to specify particular circumstances under which selectivity would occur has not been a great success. Unfortunately, it remains the only systematic theoretical effort, as well as the only one that has generated a body of empirical research.

Voluntary Exposure to Information

It is possible to take an entirely different approach to the lack of support for the selective exposure hypothesis. Rather than attempt to explain, or explain away, the negative results, it might be fruitful to accept them at face value (at least for the time being) and turn instead to the more general problem of the factors that *do* affect voluntary exposure to information. In this way, it might be possible to understand more about exposure in general, and thus to determine why *de facto* selectivity occurs.

Education and social class. One class of factors is those individual differences or predispositions that are theoretically independent of partisan preferences. As indicated above, clearly the most powerful known predictor of voluntary exposure to mass communications of an informational or public affairs sort is the general factor of education and social class. Two representative studies indicate the magnitude of its predictive power. Star and Hughes report that 68 percent of their college-educated respondents were exposed to the UN campaign in at least three media, while only 17 percent of the grammar-school-educated respondents were—only one-fourth as many. Key presents Survey Research Center data indicating that college-educated

⁴¹ L. K. Canon, "Self-Confidence and Selective Exposure to Information," in Festinger, *Conflict, Decision, and Dissonance*; J. L. Freedman, "Confidence, Utility, and Selective Exposure: A Partial Replication," *Journal of Personality and Social Psychology* 2 (1965): 778-80.

persons comprised over four times as many of those who were exposed to the 1956 presidential campaign in at least four media as did grammar-school-educated respondents. And of those exposed to the campaign in no media, 3 percent were college-educated and 58 percent had only grade-school educations—almost twenty times as many.⁴² So, in contrast to the rather pale and ephemeral effects of selectivity, de facto or otherwise, education yields enormous differences. Why it produces such differences is not known and remains a provocative question, and a subtler one than might appear at first glance.⁴³

Utility of information. The perceived utility of the information is another factor likely to have a major effect on exposure preferences. It is obvious that information varies greatly in the extent to which it will serve a useful, practical purpose, although this fact has often been ignored in previous research. It seems likely that the greater the perceived utility of the information, the greater will be the subject's desire to be exposed to it. Utility may have been an important variable in several exposure experiments. For example, in Adams's study mentioned earlier, in which he offered women a choice between a talk on environmental factors and one on hereditary factors in child behavior, the former was potentially of greater practical importance and was preferred by a 3-to-1 margin. Similarly, Maccoby et al. offered housewives a pamphlet on toilet-training and recorded how many requested the pamphlet; they sent the pamphlet to a different group of women and recorded how many actually read it. The subjects were divided into those who had an only child between the ages of three and twelve months (critical group), those who had an older child (post-group), and those who had no children (pre-group). Presumably the pam-

⁴² V. O. Key, Jr., *Public Opinion and American Democracy* (New York: Knopf, 1961), p. 349.

⁴³ For example, see the discussion in R. E. Lane and D. O. Sears, *Public Opinion* (Englewood Cliffs, N.J.: Prentice-Hall, 1964), pp. 62-63. Another possibility worth mentioning is that social class or education may be directly related to selectivity. Most of the experimental studies cited here were conducted with middle-class college students, and other types of subjects might have yielded greater support for selective exposure. However, there are no relevant data available, and, given the record to date, we would hesitate to bet on these being critical factors.

phlet was most useful to the critical group. This group expressed more interest in getting the pamphlet (71 vs. 36 and 38 percent for the other groups), and a greater percentage of them read it when it was sent to them (88 vs. 48 and 47 percent).⁴⁴ And both Mills et al. and Rosen found that students were more interested in reading about the merits and demerits alike of the exam they had decided to take than about the exam they had decided not to take. Finally, Canon and Freedman explicitly varied utility. The subjects made a decision on what was supposedly a case study in business and were then offered a choice of articles supportive or nonsupportive of their choice. Before rating the articles, they were told either that they would have to present their reasons for deciding on the case as they did, or that they would engage in a written debate in which they would have to rebut arguments from the opposing side. It was assumed that in the former case supportive information would be more useful, since it would provide necessary reasons for their decision. In the latter case, nonsupportive information would presumably be more useful, since the subject could not prepare his rebuttal without knowing what the opposition believed. In both studies, the more useful information was significantly preferred to the less useful, regardless of which was supportive or nonsupportive of the subject's decision.

Thus the evidence strongly supports the contention that information that is expected to serve a practical purpose is preferred to less useful information. And, just as with education, the effects are large and highly significant.

Past history of exposure on the issue. One would surely think that an individual's past history of exposure would influence his subsequent information preferences. Indeed, in several studies it has been shown that exposure to one side's arguments is likely to increase the chances of voluntary exposure to the other side's. As indicated above, Sears gave subjects testimony indicating, in some cases, the defendant's guilt, and in others, his innocence. After being introduced to the case in this one-

⁴⁴ N. Maccoby, A. K. Romney, J. S. Adams, and Eleanor E. Maccoby, "Critical Periods in Seeking and Accepting Information," in *Paris-Stanford Studies in Communications* (Stanford: Institute for Communications Research, 1962).

sided manner, the subjects strongly preferred to see the summation given by the attorney favoring the opposite view.⁴⁵ In another study, Sears gave subjects neither, one, or both attorneys' summations from a court trial. In the no-summation and two-summation conditions, subsequent information preferences were unsystematic and unrelated to the subject's opinions. When given a single summation, however, the subject strongly preferred information favoring the *other* side, regardless of whether or not he sympathized with it.⁴⁶ And when Freedman gave subjects material biased against a candidate for an overseas conference, subjects preferred material favorable to him; if the bias was in his favor, they preferred material unfavorable to him.⁴⁷

These three studies give, therefore, a highly consistent picture: in each case, when subjects were exposed initially to biased or one-sided information, they later preferred information favoring the opposite position, regardless of whether it attacked or supported their own position. How far this generalization may be extended is, however, unclear at this time.

Education, information utility, and past history of exposure are but three of the many factors that no doubt influence exposure preferences and rates of exposure. These are important in the present context for two main reasons. First, they have been demonstrated to affect exposure in a powerful way, whereas demonstrations of selective exposure have been very weak. Hence, selectivity may at best be a rather trivial variable relative to other influences upon exposure. Second, they offer ways of explaining the occurrence of *de facto* selectivity without assuming the existence of underlying preferences for supportive information. As indicated earlier, propaganda may often reach mainly those sympathetic to it simply because it advocates positions generally shared by those who have high rates of exposure to *all* propaganda. And when supportive information is most useful, as in the case of Adams's pro-environment talk or arti-

⁴⁵ Sears, "Biased Indoctrination and Selectivity of Exposure to New Information."

⁴⁶ Sears, "Opinion Formation and Information Preferences in an Adversary Situation."

⁴⁷ Freedman, "Preference for Dissonant Information."

cles describing the merits of an exam one must take, it may be preferred; but when nonsupportive information is more useful, as in the case of Rosen's choice-reversal article, it may be preferred. So *de facto* selectivity effects may occur as a result of particular combinations of variables that are themselves extraneous to the supportive-nonsupportive dimension.

Conclusions

This paper has been concerned primarily with evaluating the evidence for the existence of selectivity in voluntary exposure to information. There seems to be some evidence (although not as unequivocal as often claimed) for the existence of *de facto* selectivity. Most audiences for mass communications apparently tend to overrepresent persons already sympathetic to the views being propounded, and most persons seem to be exposed disproportionately to communications that support their opinions.

On the other hand, a considerable amount of experimental research has uncovered no general psychological preference for supportive information. Under some circumstances, people seem to prefer information that supports their opinions; under other circumstances, people seem to prefer information that contradicts their opinions. In no way can the available evidence be said to support the contention that people generally seek out supportive information and avoid nonsupportive information.

These two conclusions are paradoxical. How can it be that people are in fact selective, yet display no trace of a general preference for supportive information? A variety of answers have been provided above and need not be summarized here. Most generally, examples of *de facto* selectivity come from communication settings in which exposure is complexly determined by a great many factors that are incidental to the supportiveness of the information. We have reviewed research on only three of these factors, but many more are surely as important. Clearly, these factors can themselves on occasion produce *de facto* selectivity. One general possibility is that they do more

often than they do not, presumably because in natural communication situations such variables are not randomly related to communicators' positions on various social, political, economic, religious, etc., issues. For example, those who find a particular kind of information most useful may also sympathize most with the particular editorial stance that happens, in most cases, to be paired with it. Financiers find the *Wall Street Journal's* financial news very helpful and also (probably incidentally) tend to agree with its politics. College professors and diplomats rely upon the *New York Times's* comprehensive news coverage and often agree with its editorials as well. These are not merely coincidences. Nor are they necessarily examples of selective exposure. However, it is beyond the scope of this paper to inquire into the reasons for such correlations.

Another possibility is that selectivity may be considerably more important on a long-term basis than at any given moment. Many people may be willing to take on the task of exposing themselves to nonsupportive information on any given occasion. Yet it may be quite tiring and aggravating, and thus something to be undertaken only at widely separated moments of particular intellectual fortitude. So dramatic selectivity in preferences may not appear at any given moment in time, but, over a long period, people may organize their surroundings in a way that ensures de facto selectivity. The data relevant to this point deal mostly with the acquisition of friends and spouses (rather than with information or exposure preferences), and so also lie beyond the scope of this paper. Nevertheless, the argument is intriguing and the data have been ingeniously gathered.⁴⁸

Finally, this research suggests a change of emphasis in our thinking about how people deal with discrepant information. It has generally been assumed that selective exposure and other processes that bar information reception are prime mechanisms by which people resist influence.⁴⁹ Perhaps such processes are not very important after all. Feather reports that smokers do

⁴⁸ T. M. Newcomb, "The Persistence and Regression of Changed Attitudes," *Journal of Social Issues* 19 (1963): 3-14; Berelson et al., *Human Behavior*.

⁴⁹ Cf. Klapper, *The Effects of Mass Communications*.

not avoid reading unpleasant information about smoking and lung cancer; rather, they subject it to careful and mercilessly unsympathetic scrutiny.⁵⁰ Perhaps resistance to influence is accomplished most often and most successfully at the level of information evaluation, rather than at the level of selective seeking and avoiding of information.

⁵⁰ Feather, "Cognitive Dissonance, Sensitivity, and Evaluation."

DAVID KRECH AND
RICHARD S. CRUTCHFIELD

Perceiving the World

As we have seen in the preceding chapter, there still remain some unknowns concerning how selectively one exposes himself to communication. There is less doubt about the selectivity of perception. One of the three propositions around which Krech and Crutchfield organize this lucid and insightful account is: "Perception is functionally selective." That is to say, our cognitive worlds are organized and meaningful, and the way we perceive whatever we expose ourselves to in the mass media is determined by how it will be useful to us against the background of the cognitive structure we have already built. This chapter can be usefully read in connection with the review of research on selective exposure by Sears and Freedman, and the chapter by Lippmann which follows. Dr. Krech and Dr. Crutchfield are both on the faculty of the department of psychology at the University of California at Berkeley. The chapter was originally published in *Theory and Problems of Social Psychology* (now revised as *The Individual and Society*), issued and copyrighted by McGraw-Hill, New York, 1948. It is reprinted here by permission of the authors and the publisher.

Two Major Determinants of Perception

THE PRINCIPLES of organization are frequently grouped into two major categories: the principles relating to the *structural* factors of perception and those relating to the *functional* factors involved in perception. Experimental and theoretical literature in perception psychology is replete with discussions as to the relative importance of these two sets of factors.

STRUCTURAL FACTORS

By *structural* factors are meant those factors deriving solely from the nature of the physical stimuli and the neural effects they evoke in the nervous system of the individual.¹ Thus, for

¹ The term *autochthonous* is frequently used by the Gestalt psychologist when referring to these factors.

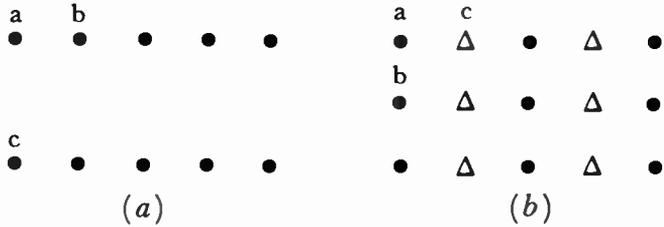


FIGURE 1.

the Gestalt psychologist, perceptual organizations are determined primarily by the physiological events occurring in the nervous system of the individual in direct reaction to the stimulation by the physical objects. Though not denying the influence, under certain conditions, of motivation and mental set, they emphasize that the sensory factors are primary in accounting for the "look of things."

To use a very simple and common example, the Gestalt psychologist would point out that our perception of the dots in Figure 1a is perforce a perception of two horizontal groupings and not, say, an ungrouped collection of dots or five vertical groups, etc. Furthermore, they would insist that the factors which force this organization derive from the spatial relationships among the physical dots themselves as faithfully projected in the sensory region of the brain and are relatively independent of our reasoning, needs, moods, past learning, etc. To repeat: those sensory factors which are independent of the perceiving individual's needs and personality and which force certain organizations in his cognitive field are referred to as "structural factors of perception." The isolation of these factors, their careful description, and the laws of their operation have led to the formulation of the "laws of organization."

FUNCTIONAL FACTORS

The *functional* factors of perceptual organization, on the other hand, are those which derive primarily from the needs,

moods, past experience, and memory of the individual.² Thus, for example, in an experiment performed by Bruner and Goodman, two groups of children (one a poor group from a settlement house in one of Boston's slum areas and the other a rich group from a "progressive school in the Boston area, catering to the sons and daughters of prosperous business and professional people") were asked to judge the size of various coins. The differences in the perceptions of the two groups of children were striking, with the poor group overestimating the size of the coins considerably more than did the rich group. The experimenters suggest that these results indicate the effect of need upon perception, and they formulate the following two hypotheses as possible general laws:

1. *The greater social value of an object, the more will it be susceptible to organization by behavioral determinants.*
2. *The greater the individual need for a socially valued object, the more marked will be the operation of behavioral determinants.*

Another illustration of the operation of functional factors is found in an experiment by Levine, Chein, and Murphy.³ In that experiment, ambiguous drawings, when presented behind a ground-glass screen to hungry college students, were more frequently perceived as food objects (ham sandwiches, salads, etc.) than when presented to college students who had just finished eating. The different perceptions of the hungry and not-hungry students could not be due to "structural" factors, since the same pictures were presented to both groups but could be due only to the differences in need or motivation of the members of the two groups.

² The term *functional* as applied to these factors was first suggested by Muenzinger, (K. Muenzinger, *Psychology: The Science of Behavior* [New York: Harper, 1942]). In their treatment of these same factors, Bruner and Goodman suggest the term "behavioral determinants" which they define as ". . . those active, adaptive functions of the organism which lead to the governance and control of all higher-level functions, including perception . . ." (J. S. Bruner and C. C. Goodman, "Value and Need as Organizing Factors in Perception, *Journal of Abnormal Social Psychology* 42 [1947]: 33-44).

³ R. Levine, I. Chein, and G. Murphy, "The Relation of Intensity of a Need to the Amount of Perceptual Distortion," *Journal of Psychology* 13 (1942): 283-93.

While quantitative laws of how these "functional" factors actually operate in perception are lacking, a great deal of experimental work is available that demonstrates their pervasive influence in perception.

Proposition I

The perceptual and cognitive field in its natural state is organized and meaningful.

This first proposition affirms that the cognitive field, except perhaps in rare pathological conditions, is never a "blooming, buzzing confusion" of discrete impressions, unrelated experiences, and unitary sensations. Whether we are discussing the initial sensory stimulations of the infant or the experiences of the adult when confronted by new and even bizarre objects and events, the individual's cognitive fields are organized and meaningful. A few examples may clarify the meaning of this proposition.⁴

"SIMPLE" PERCEPTION

A baby is presented, for the first time in his life, with a red balloon on a white table. Considered purely physically, the "balloon" and the "table" can be described only as a visual field consisting of discrete pinpoints of stimuli consisting of light of varying wave lengths. What is the infant's resulting experience from this conglomeration of physical stimuli? Is it a mosaic of indifferently related kaleidoscopic sensations of reds and whites merging into one another, without form and without clearly defined boundaries, or is the child's experience better described as a perception of a red object having form and solidity against a background of a white object with its own

⁴ For a discussion of the distinction between organized perceptions "without meaning" and organized perceptions "with meaning," see E. C. Tolman, "Gestalt and Sign-Gestalt," *Psychological Review* 40 (1933): 391-411. He characterizes the first concept as that held by the "pure Gestaltist," the second as that held by the "sign-Gestaltist."

form and solidity? Proposition I would require that the latter situation hold. The infant's perceptual field would consist of at least two discriminable, meaningful structures. The meanings might be extremely simple and might even be wrong—but there would be meaning. Thus the red object might have the meaning that "this object if inserted in the mouth can be chewed and swallowed," and the white object may mean "this object, if pushed, will jiggle." The important thing is that the baby's experiences will be organized and meaningful.

Proposition I does not assert how much of this cognitive structure is due to the previous experiences of the baby or if the meanings are conditioned by hunger and activity needs. All we are concerned with is the nature of his cognitive field when he is stimulated by the balloon and the table.

THE STRANGE AND BIZARRE

Or take another example. A savage who has never seen a white man or any of the paraphernalia of the white man's civilization sees an Army airplane descend from the skies and make a three-point landing and sees Second Lieutenant Arbuthnot come out of the plane. Obviously our savage will see the airplane and Arbuthnot as organized objects, but will they, because he has never seen their likes before, be completely meaningless to him? Again, the meaning he experiences may be wrong, but there will be meaning. He may experience the meaning of a "bird" as part of his purely visual precept of the airplane; he may ascribe the meaning of "God" or its equivalent to Arbuthnot, 2nd Lt. AUS. He will not have to wait until he is given instructions or until he has had further and extended experiences with these strange objects before his cognitive field is organized into a meaningful one.⁵

⁵ The American school child who listened to his teacher sing various Christmas carols in foreign tongues and when asked to join with her sang "Atomic Bomb, Atomic Bomb" to the tune of "O Tannenbaum, O Tannenbaum" is an amusing and at the same time a somewhat horrifying illustration of the tendency to perceive strange sounds meaningfully. Akin to this is the youngster's remark, who after hearing the hymn that starts "Gladly the Cross I'd Bear," asked "Why was the bear cross-eyed?"

FORMING AN IMPRESSION OF A PERSONALITY

A final example: in an experiment reported by Asch, an attempt was made to determine how people form impressions of personality through hearing simple descriptions of the personality.⁶ The experimenter read to his subjects (college students) a number of discrete characteristics which were said to belong to an unknown person. He then instructed his subjects to write a brief description of the impression the subject had gained of this unknown person. One such list, for example, was: "energetic, assured, talkative, cold, ironical, inquisitive, persuasive." The list was read with an interval of approximately five seconds between the terms. Then the reading was repeated. Below are reproduced two of the typical sketches obtained from the subjects:

He is the type of person you meet all too often: sure of himself, talks too much, always trying to bring you around to his way of thinking, and with not much feeling for the other fellow.

He impresses people as being more capable than he really is. He is popular and never ill at ease. Easily becomes the center of attraction at any gathering. He is likely to be a jack-of-all-trades. Although his interests are varied, he is not necessarily well versed in any of them. He possesses a sense of humor. His presence stimulates enthusiasm and very often he does arrive at a position of importance.

Note how the discrete terms of the list have been organized into a living, meaningful, and even colorful personality. Not only have the individual terms *energetic*, *assured*, *talkative*, etc., been perceived in an organized way with an organized meaning, but the resulting organization of the terms has permitted the subject to "perceive" characteristics that were not even mentioned ("He possesses a sense of humor"). Asch sum-

⁶ S. E. Asch, "Forming Impressions of Personality," *Journal of Abnormal and Social Psychology* 41 (1946): 258-90. This experiment of Asch's is an interesting and valuable illustration of an experimental attempt to apply principles of "pure" perception to social material.

marizes the results of his experiments as follows: "When a task of this kind is given, a normal adult is capable of responding to the instruction by forming a unified impression. Though he hears a sequence of discrete terms, his resulting impression is not discrete. All subjects . . . of whom there were over 1,000 fulfilled the task in the manner described. . . . Starting from the bare terms, the final account is completed and rounded."

GENERAL COMMENTS

What is true about our experiences with objects and people is also true about our experiences with events and ideas. Strange and new social mores, taboos, and relationships are not seen by us as meaningless but are immediately perceived with meaning. We cannot help doing this. Man is an organizing animal. This accounts, in many instances, for our misinterpretation or misunderstanding of the customs, habits, values, and institutions of foreigners and strangers. We cannot say to ourselves, "Hold off any interpretation until you collect all the facts." As soon as we experience *any* facts, they will be perceived as organized into some sort of meaningful whole. This is a universal characteristic of the cognitive process and not a weakness of the impatient or prejudiced individual. In the experiment of Asch's referred to above, an experimental demonstration of the immediacy of this process is provided. In one of his experimental setups Asch read two different lists of traits to two different groups of subjects and again asked for personality descriptions. The two lists were identical with regard to the traits used but differed in the order of succession. For example, one group heard the following list: "intelligent, industrious, impulsive, critical, stubborn, envious." The other group heard the same words, but in reversed order: "envious, stubborn, critical, impulsive, industrious, intelligent." The descriptions obtained from the two groups of subjects differed markedly, leading Asch to conclude, "When the subject hears the first term, a broad, uncrystallized but directed impression is born. The next characteristic comes not as a separate item, but is related to the established direction."

Our perception of the dots in Figure 1a as two sets of horizontal lines and the overall impression we form of a man's personality from knowing only one or two facts about him are both instances of the same fundamental process of cognitive organization. This principle also helps us to understand the tenacity with which people hold on to "disproved" scientific theories or economic and political dogmas. No matter how much evidence one can bring to bear that a scientific theory does not fit the known facts, scientists are reluctant to give it up until one can give them another integration to take the place of the old. Merely attacking a well-integrated theory cannot be very effective. The old theory does integrate facts for people, does organize discrete experiences. In the absence of some other way of organizing facts, people will frequently hold on to the old, for no other reason than that.

Proposition II

Perception is functionally selective.

No one perceives everything that there is "out there" to be perceived. Our mental apparatus is not an indifferent organizing machine ready to accord equal importance to all stimuli that impinge upon our sense organs. The factors that determine the specific organization of our cognitive field and select out only certain stimuli to integrate into that field are frequently at work even before we are exposed to the physical stimuli. Typically, only certain physical stimuli are "used" in making up the organized perception, while other stimuli are either not used at all or are given a very minor role. This is what is meant by saying that perception is "selective."

Proposition II, however, also indicates that this selectivity is functional. The objects that play the major role in the organized perception, the objects that are *accentuated*, are usually *those objects which serve some immediate purpose of the perceiving individual.*⁷ As our first motivational proposition has

⁷ It should be clear that this does not necessarily mean that *only* those stimuli which serve some function or other will be noticed or seen by the subject. This statement affirms that the functionally significant stimuli will be given the

indicated, our basic, most useful unit in understanding the social behavior of the individual is the molar unit—a unit in terms of needs, tensions, and goals. To ask the question, then, "Why are certain objects selected to play a major role in most cognitive organizations?" is to ask the question, "What function does any cognitive organization serve?" The answer to this question not only will tell us what objects will be selected for perceptual organization but will also indicate the meaning with which those objects will be perceived.

FUNCTIONAL SELECTIVITY OF PERCEPTION AND DYNAMICS OF BEHAVIOR

Illustrations of the effects of needs, mental sets, moods, etc., in selecting out certain objects for a major role in perception are commonplace. So, too, are illustrations of the effect of these dynamic processes on the meanings given to the resulting perceptions.

Needs. Let us take the simple example of two men seated at a lunchroom counter surveying the posted menu on the wall. One is very hungry; the other, only thirsty. Both are exposed to the same physical objects, yet the first will notice the hamburger and tomato-and-lettuce sandwiches, while the "tea, coffee, beer, pepsi-cola" items will be neglected or relatively so. The second man will react in the opposite manner. Ask both men to tell you what they "saw" on the menu, and the first will respond with a list of food items "and other stuff"; the second will enumerate the drink items "and other things." In one case the food items have been clearly and specifically perceived and organized against a background of nondifferentiated "other stuff"; in the second case the figure-ground relationships have been reversed.

That needs, rewards, and punishments can even determine in simple visual perception which aspect of a visual field will

major role to play, although other stimuli may be noticed peripherally, as it were. Bruner and Goodman make the further interesting suggestion that, with habitual selection, the stimuli which are thus selected for major attention tend to become progressively more vivid and achieve greater clarity.

be selected out as the figure and which as the ground has been demonstrated by an experiment of Schafer and Murphy.⁸ In that experiment two somewhat ambiguous figures were presented momentarily to the subjects. Each figure was so designed that part of the picture could be seen as an outline of a human face. Every time one of these faces was presented and seen as a face, the subject was rewarded (with money); every time the other figure was presented and seen as a face, the subject was punished (some of his money being taken away). The technique, in other words, was to build up a strong association between certain visual patterns and rewards and between other visual patterns and punishments. After this was done, the "rewarded" pattern and the "punished" pattern were combined into one picture in such a manner as to make it possible to perceive either face as the figure or as the ground. A significantly higher number of the faces that had previously been rewarded, when perceived alone, were not perceived as the *figure* in this combined picture than were faces that had been punished. Fifty-four out of sixty-seven perceptions were perceptions of the rewarded faces as figures.

That the meaning of what is selected for major attention in perception is influenced by needs is also apparent. We have already seen both in Levine, Chein, and Murphy's experiment and in Bruner and Goodman's experiment that the immediate perception of ambiguous objects is shaped by the hunger needs of the subjects and that the perceived size of a coin is determined by the differential goal character of the coins for the poor and rich children. On a more complicated level, Sanford has shown that the need for food, in children and in adults of college age, has a significant effect upon word association, interpretation of "neutral" pictures (i.e., pictures having nothing to do, directly, with eating or with food), chain associations, completion of drawings, and completion of words where only the first two letters of a word were given.⁹ For example, a picture

⁸ R. Schafer and G. Murphy, "The Role of Autism in Visual Figure-Ground Relationship," *Journal of Experimental Psychology* 32 (1943): 335-43.

⁹ R. N. Sanford, "The Effects of Abstinence from Food upon Imaginal Processes," *Journal of Psychology* 2 (1936): 129-36; "A Further Experiment," *Journal of Psychology* 3 (1937): 145-59.

of a baby, a finger of whose hand was extended, was interpreted to mean "He's sticking his finger in the pie" by some of the hungry subjects, while some of the nonhungry subjects interpreted it as "He's pointing to a toy."

The successful diagnosis of individual need structures by the "projective technique" provides dramatic illustrations of the principles we have been discussing here. For the very use of this technique depends upon the fact that the specific perceptual and cognitive organizations with which the individual responds to pictures and words reflect his basic needs.

Mental Set. Here, too, illustrations abound in everyday experiences. We see hundreds of men, every day, wearing different suits of clothing—suits that differ in cut, material, color, styling, number of buttons, etc. But usually all we perceive is that they are wearing clothes, and our resulting perceptual organization is not a very clear-cut and differentiated one. What is the mental picture you have, for example, of the suit you saw your friend wear yesterday? But if we are on the way to a store to buy a suit, our perceptions of the clothes worn by friends and even strangers change rather remarkably. We notice the colors of the suits; we see shapes of pockets, cuts of lapels, presence or absence of pocket flaps which we never perceived before. With our changed mental set different objects are selected out for perception, and our resulting cognitive structures become much more differentiated and detailed.

A simple experiment by Murray has indicated how the mental set of the individual influences the meaning of what he perceives.¹⁰ Using girls as his subjects, Murray asked them to describe the picture of a man under two conditions—before these subjects had played a game of "murder" and after. In the latter instance the subjects tended to see much more maliciousness in the man's features than they did in the former instance.

The policeman, the social worker, the ward politician, and the foreign visitor walking through the same slum district not only interpret what they see differently but actually perceive different objects. The mental set of the perceiver can some-

¹⁰ H. A. Murray, "The Effect of Fear upon Estimates of Maliciousness of Other Personalities," *Journal of Social Psychology* 4 (1933): 310-29.

times be of absolute importance in determining selective perception.

Mood. An ingenious experiment of Leuba and Lucas provides some striking illustrations of how the mood or temperament of an individual operates to select out different stimuli for perceptual organization and tends to determine the meaning of the stimuli so selected.¹¹

The experiment involved the description of six pictures by three subjects when in each of three different moods: happy, critical, and anxious. Each of the three subjects was first hypnotized; the first mood was then induced by the appropriate hypnotic suggestions; then the pictures were shown. After the subject had observed each picture, he was asked to describe what he had seen. When the six descriptions had been obtained, the subject was allowed to rest for a while, the first mood was removed by suggestion, he was brought back to his "normal" hypnotic state and told that he would forget having seen the pictures and what he had said about them. Then the next mood was induced, and the procedure repeated.

The final hypnotic suggestions for the different moods were as follows:

HAPPY MOOD: "Now you are feeling very happy and you are in a cheerful and joyous mood. You feel as if everything is rosy and you are very optimistic. You have a comfortable feeling of well-being; nothing is worrying you. You feel perfectly at peace with everything and everyone. You are in a very happy, cheerful, and optimistic mood."

CRITICAL MOOD: "Now you are very critical; you are quick to find fault and to condemn unfavorably. Your judgment of others is very harsh and severe. You see failings and faults very clearly. You are very critical and fault finding."

ANXIOUS MOOD: "Now you are quite anxious. You are disturbed over some possible misfortunes. You are disquieted and concerned as to something in the future. You are a little fearful and mildly alarmed. You have a feeling as if you were expect-

¹¹ C. Leuba and C. Lucas, "The Effects of Attitudes on Descriptions of Pictures," *Journal of Experimental Psychology* 35 (1945): 517-24.

ing something disagreeable to happen, yet were not sure that it would. You are quite anxious."

Following are three descriptions that one of the subjects gave for a picture showing "four college men on a sunny lawn, typing, listening to radio." In the happy mood his description read: "Complete relaxation. Not much to do—just sit, listen and relax. Not much at all to think about."

When this subject was in a critical mood he observed or paid attention to or perceived, different things. Now his description ran: "Someone ruining a good pair of pressed pants by lying down like that. They're unsuccessfully trying to study."

When in an anxious mood, still other items were perceived: "They're listening to a football game or world series. Probably a tight game. One guy looks as if his side wasn't winning."

Notice how in the happy mood there seems to be little attention to details. The perceptual structure seems to be fairly simple and undifferentiated. In the critical mood a specific detail—the crease in one man's trousers—seems to occupy a central role in the perceptual field, an item which had not been reported at all in the first description. In the final mood, anxious, the details of the facial expression of one of the men are closely observed and interpreted, and now the cognitive field includes something that is not even physically present—a football or baseball game.

The different moods of the subjects had a directive effect not only on *what* was observed but, even more strongly, on the meaning of what was perceived. Thus, in analyzing some of the descriptions obtained from the subjects, the experimenters write:

The meanings and feelings attached to the activities shown in the pictures and the probable causes and results of those activities are usually different from mood to mood. In a happy frame of mind the Ss see the soldier in picture III (wounded man being carried on a litter by soldiers to aeroplane) as being "well taken care of" and as being taken "back to safety" or "a transport plane." When in an anxious mood these same Ss say

the soldier "is in bad shape," "may not live," "an emergency case," "it frightens me."

Things are very rarely what they seem. The emotions, moods, personalities, and temperaments of people color and determine what they see "out there." The entire cognitive world of the individual who has an overriding need for security will be organized on quite a different basis from the individual who does not seek constant reassurances. "Wishful thinking" and "wishful perception" have similar sources. The man who fears a war and seeks peace will perceive political events, people, speeches, diplomatic forays, and production figures quite differently from the man who welcomes a war. The selectivity of perception is in large measure determined by the dynamics of behavior.

FUNCTIONAL SELECTIVITY OF PERCEPTION AND CULTURE

What we perceive, as well as how we interpret what we perceive, is not only a function of those processes which can be specifically defined as motivational ones. Our immediate perceptions are also a function of the "higher order" cognitive organizations—of beliefs, of social ideals, of morals, of cultural frames of reference. The effect of these higher-order cognitive organizations will be examined in more detail when discussing Proposition III, but for purposes of completeness a simple illustration at this point might be helpful.

Take, for example, the perceptions of an American tourist and a native Mexican at a Mexican bullfight. The American is likely to perceive and stress the pain to the animal, the messiness of the scene, and the flies. The Mexican fan, on the other hand, might perceive and stress the skill of the performer, his daring or fearlessness, the fine technical points involved, and even the fine spirit of the bull in putting up such a good fight.

What is selected out for perception not only is a function of our perceiving apparatus as physiologically defined but is partly a function of our perceiving apparatus as colored and shaped by our culture.

FUNCTIONAL SELECTIVITY OF PERCEPTION
AND STRUCTURAL FACTORS

We must always remember, however, that in addition to the various factors discussed above, the physical distribution and qualities of the stimuli also help determine which stimuli, of the welter of stimuli impinging on our sense organs, will be selected out for perception. The familiar figure-on-background or "isolation" experiment of the perception laboratory illustrates this factor in operation. A single red dot, among many black dots, will "stand out" in perception. A single Negro in a crowd of white people is much more likely to be noticed by a neutral perceiver than if that individual were seen among many other Negroes. The slogan most frequently repeated (and most loudly) is also more likely to come to the attention of the individual than the infrequently mentioned one.

The "structural" factors involved in the creation and presentation of propaganda and educational material are sometimes quite important in determining what perceptions the "victims" or "students" will experience, as we shall see when we discuss those subjects. We must be constantly on guard against neglecting these structural factors in our attempt to pay proper attention to the functional factors. The physiological functioning of the nervous system in response to the nature of the distribution of the physical stimuli in space and time also operates so as to make perception selective.

GENERAL COMMENTS

The failure to understand the implications of Proposition II, that perception is functionally selective, has led to much misguided effort and heartbreaking disappointment on the part of teachers, parents, religious missionaries, and leaders of "causes." Take a child on a slumming trip to teach him the facts of social life, and show him how haggard, lean, scrawny, and undernourished the children are, and what does he "see"? He may perceive only the interesting alleys and inviting fire es-

capas that these children have to play with as compared with the clean, sterile, and uninteresting playrooms he has at his disposal. Show a documentary film of life in Russia to an insecure and hostile American, presenting pictures of Russian factory workers doing the same sort of things that Detroit factory workers do, Russian farm hands going through actions similar to those of Iowa farm hands, Russian traffic policemen gesticulating very much the way New York City "cops" do. Will he perceive all these similarities? Probably not. He will have noticed the large tractor factories which could so easily become converted to tank factories, he will have been impressed with the "militaristic" bearing of the policemen and with the "ruthless scowl" on the face of the Russian general who appeared for a few feet on the film.

On the occasion of the 1946 reprinting of Upton Sinclair's *The Jungle*, R. L. Duffus, reviewing the book in *The New York Times* of October 13, 1946, gives an interesting illustration of how functional selectivity of perception can subvert the best intentions of the social reformer. Duffus writes:

After this book appeared, four decades ago, quite a number of Americans temporarily stopped eating meat. . . . They just didn't care for meat after they had read young Mr. Sinclair's fictionalized account of how meat was handled in the Chicago stockyards. This was not Mr. Sinclair's intention. He was a socialist and an ardent friend of the underpaid and overworked. He did not foresee that the American people, after reading of the misfortunes of his Lithuanian hero, would clamor, not for a cooperative commonwealth, but for a pure food law. . . . Young Mr. Sinclair admired the strong peasant stock that was pouring into this country so hopefully at the turn of the century. He hated to see it abused, as it was. He hated the cruelty which ground the lives out of men. He hated child labor. He hated the growling tyranny that fired and blacklisted when men formed unions to better their lot. He hated the cheating and the foul corruption that battered on the innocent. So he spent some seven weeks observing how people lived "back of the yards" and then wrote this book. . . . He . . . threw into it his burning indignation, lighted it with his ingenuous hopes of a world redeemed by socialism, and got it into print . . . it be-

came a best seller, it has been translated into twenty-seven languages, it led to reforms in the handling of meat.

Upton Sinclair was a socialist, and the facts he perceived demonstrated, to him, the need for socialism. So he saw them, and so he wrote them down. The vast majority of his readers, however, were not socialists, but they were meat-eaters, and they perceived his facts in their own way and read therefrom their own lesson. They selected out for major attention, not the stories about the little Stanislovs who were forced to work in the packing houses or the men like Jurgis who averaged a weekly salary of \$6.65, but the other stories—about the workmen and stockyard rats who had fallen into lard vats and had gone out to the world as “pure leaf lard.” Accordingly, his readers did not conclude from Sinclair’s facts that the world must be redeemed by socialism but merely that a new pure food act was required.

There are no impartial “facts.” Data do not have a logic of their own that results in the same perceptions and cognitions for all people. Data are perceived and interpreted in terms of the individual perceiver’s own needs, own emotions, own personality, own previously formed cognitive patterns.

Proposition III

The perceptual and cognitive properties of a substructure are determined in large measure by the properties of the structure of which it is a part.

To know that experience in its natural state is organized and meaningful (Proposition I) and that the nature of the organization is determined functionally (Proposition II) is not enough. Our mental world is a structured or organized one, and it can also be seen as broken down into hierarchies of structures. Our cognitive field does not consist of completely independent organized structures; each of our perceptions is not an experience that “lives a life of its own,” as it were. Every perception is embedded in an organization of other percepts—the whole

going to make up a specific "cognitive structure." Each of these cognitive structures, in turn, can be broken down into several related substructures. Thus, when we perceive a politician, our perception of that particular politician is influenced by all our other percepts involving politicians. But the major structure, politicians, may have substructures: Democratic politicians, Republican politicians, honest politicians, etc. What we need for an adequate understanding of any one perception is knowledge about the interrelationships among the structures and substructures of our cognitive fields. Proposition III is designed to answer the questions raised by this point and states that the perception of a single object or group of objects is determined by the nature of the cognitive whole in which the percepts of these objects will be embedded.

ILLUSTRATIONS FROM SIMPLE VISUAL PERCEPTION

Figure 2 is usually perceived as a simple figure of three lines meeting at a center point O . Each angle made by any two adjacent lines, say angle AOC , can be described as a substructure of the figure. That is, the perception of that angle is of an organized figure "in its own right," but it is also perceived as a part of a larger figure—the whole of Figure 2. Each of these angles is usually perceived as an obtuse angle, i.e., larger than a right angle. What would happen to our perception of angle AOC if we added a few lines so as to induce a change in our perception of the *whole* structure without in any way changing the lines that make up angle AOC ? The answer is immediately given if

FIGURE 2.

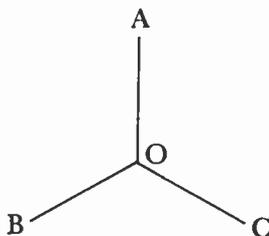
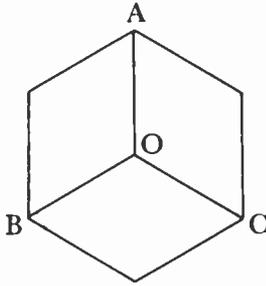


FIGURE 3.



we look at Figure 3. Now we perceive the substructure, angle AOC , as a right angle! Although we have not done anything physically to angle AOC , it "looks" different. It looks different because the *whole* figure, of which angle AOC is a part, looks different.

The same dependence of the perceptual properties of a part on the whole is seen in the *contrast* and *assimilation* experiments in visual perception. The results of these experiments can be summarized by the following statements. (1) Substructures of a major structure will tend to look either as much alike as possible (assimilation) or as much unlike as possible (contrast). (2) Assimilation appears when the differences between the substructures and the major structures are small; contrast appears when the differences are large. Thus, a series of black dots, in a single row, will all appear equally black despite the existence of minor differences in shade among them. Each dot, as a substructure of the row of dots, is assimilated, and the minor differences in blackness are not usually perceived. Conversely, if one dot were much brighter than the others, then that dot would be perceived as a light gray by virtue of being a member of a black contrasting series.

Now suppose that all you could see were angle AOC of Figure 2 or only the single dot in our last illustration and you were told that a given person insisted that he perceived angle AOC as a right angle or that another individual perceived the dot as light gray. Would it not appear to you either that these people had defective vision or that they were inaccurate in

their descriptions of their own perceptions? This would be a logical deduction if you could not see the whole of Figure 2 of which angle AOC was a part or if you could not see the entire set of dots. What is true for simple visual perception is also true for other instances of perceptual organization. We cannot understand an individual's perception, or interpretation of an event that is part of a larger organization for *him*, unless we also know what that larger organization is. This frequently accounts for the apparently incomprehensible perceptions and judgments of people and our failure to "understand" such people.

PERCEIVING TRAITS OF INDIVIDUALS AND OF GROUPS

A reformulation of this whole-part principle, in more specific social terms, might be helpful at this point. Such a reformulation is given in the following statement. *When an individual is apprehended as a member of a group, each of those characteristics of the individual which correspond to the characteristics of the group is affected by his group membership, the effect being in the direction of either assimilation or contrast. Among other uses, this formulation can be helpful in aiding us to understand why, in our perception of people, we frequently are "biased" or "unjust."*

Assimilation and contrast. Suppose you were told that Arbuthnot is a member of the Communist party. Now suppose, also, that your cognitive field corresponding to "Communists" consists of the following characteristics: Communists speak with foreign accents, are always ready to incite to riot, and are unkempt in their appearance and dress. Let us now assume that Arbuthnot is, actually, somewhat poorly dressed. How will you perceive his dress? Most probably (if you do have that simple and stereotyped picture of Communists) you will perceive his clothing as "unkempt"; whereas if you had apprehended Arbuthnot as a member, say, of the "genteel poor," you might have perceived his dress as being "worn, but neatly and cleanly patched." What you would have done in the first instance is to have perceived Arbuthnot's dress in terms of the corresponding characteristics of the larger group of which he is a part (Com-

munist), and, by assimilation, you would have ascribed the qualities of the group to the individual. In the second instance, your perceptual processes would have been of the same order, only this time your perception of Arbuthnot's dress would have been assimilated to a group having different characteristics.

Suppose, on the other hand, that Arbuthnot were dressed in the neat and intact dress of most of your acquaintances. Now, how would you perceive Arbuthnot? Most probably as being a "very well-dressed Communist." You would not have thought to use the phrase "very well-dressed" if you had apprehended Arbuthnot as a member of the Republican National Committee. In that case you would merely have perceived that he was "properly dressed." But since you know that Arbuthnot is a Communist, you have perceived his dress in terms of the corresponding characteristics of the group of which he is a part; and this time by contrast, he would seem "very well-dressed."

In the same way do we judge the personality traits and motivations of individual Jews, Republicans, Negroes, Catholics, Russians, etc. Because so many Americans ascribe characteristic personality traits to these groups, as groups, their perceptions of the individual members of these groups usually show typical biases. Thus many Americans, through the operation of the assimilation phenomenon, tend to overestimate the shrewdness of a particular Jew, or the inscrutability of a somewhat reticent Russian—because they believe Jews to be shrewd and Russians to be inscrutable. Because of contrast, they tend to overestimate the intelligence of a Negro who is normally intelligent and to underestimate the religious conservatism of a Catholic who is liberal in some of his religious views. Again, the reason appears to be due to the stereotyped notion that Negroes are stupid and that Catholics are extremely conservative believers. The common observation, during the war, of the tendency of the American soldier to regard any normally decent German as a "very good guy" is an instance of the contrast phenomenon, since many of our soldiers had been indoctrinated concerning the extreme ruthlessness and inhumanity of the Nazi and had generalized it to Germans.

FRAMES OF REFERENCE

The whole-part principle can be summarized in still another way: any stimulus is perceived in relation to other stimuli with which it is organized. This formulation, as Sherif and Cantril point out, is the basic definition of the term *frame of reference*, a term that they define as follows: "The term 'frame of reference' is simply used to denote the functionally related factors (present and past) which operate at the moment to determine the particular properties of a psychological phenomenon (such as perception, judgment, affectivity)." ¹²

Sherif has made this formulation of our Proposition III his major concept in social psychology and has generalized it to account for many varied processes.¹³ As Sherif and Cantril point out, in the volume cited above, "The scale of magnitudes against which subsequent stimuli of a similar kind are judged, the organized perceptual whole which determines the particular relative properties of its parts, the established social status in relation to which responses to other individuals and groups are shaped are all specific cases of frames of reference."

Illustrations of the frame-of-reference phenomenon abound in psychophysical experiments. Thus, for example, Wever and Zener have shown that when subjects are required to judge the weight of a series of objects as "light," "heavy," etc., the judgment of each weight is a function of the total series, since if the series itself is changed from a light series to a heavy one, the same object that was formerly judged heavy will now be judged as light.¹⁴

Similar results are obtained when the judgments to be made are of a much more complicated sort and are directly related to

¹² M. Sherif and H. Cantril, *The Psychology of Ego-Involvement* (New York: Wiley, 1947).

¹³ M. Sherif, "A Study of Some Social Factors in Perceptions," *Archives of Psychology*, no. 187, 1935; M. Sherif, *The Psychology of Social Norms* (New York: Harper, 1936).

¹⁴ E. G. Wever and K. E. Zener, "The Method of Absolute Judgment in Psychophysics," *Psychological Review* 35 (1928): 466-93.

social material. As an instance of such experiments the work of McGarvey can be cited.¹⁵ McGarvey had her subjects rate the "social prestige" of various occupations and found that the judged desirability of any given occupation was determined by the entire series of occupations to be judged.

Helson has attempted to treat this phenomenon of relativity of perception and judgment in terms of his theory of adaptation and has suggested a carefully worked out mathematical formulation to help understand and predict the "universality of shifts in scale-value with change in comparison-stimulus."¹⁶ Because his theory goes beyond the mere observation that the perception of any single stimulus is changed as the related stimuli are changed, and because his theory is designed to predict some specific properties of the perception of certain stimuli, it is of some importance to see the implications of his formulation for social psychology. Briefly, his theory can be stated in the following way.

The effects of stimulation result in an organized perception (our Proposition I). For every such organized perception there is assumed a stimulus that represents the pooled effect of all the stimuli that gave rise to the organized perception. The individual may be said to be "attuned or adapted" to this central stimulus. That is, stimuli that are near this value (in intensity or affective value, etc.) will be perceived as "indifferent, neutral, doubtful, equal, or the like, depending upon the context . . ." of the judgment involved. Stimuli that are perceived in that way or judged in that way are said to be at "adaptation level." Stimuli that are above the adaptation level "are assumed to establish positive gradients" with respect to the adaptation-level stimulus and will be perceived as "good," "loud," or "strong." Similarly, stimuli that are below the adaptation level "establish negative gradients" with resulting perceptions of the opposite kind. If, now, new stimuli are introduced, which are

¹⁵ H. R. McGarvey, "Anchoring Effects in the Absolute Judgments of Verbal Materials," *Archives of Psychology*, no. 281, 1943.

¹⁶ H. Helson, "Adaptation-Level as a Frame of Reference for Prediction of Psychophysical Data," *American Journal of Psychology* 60 (1947): 1-29.

above the adaptation-level stimulus, a new adaptation-level stimulus will gradually be established and all subsequent stimuli will then be perceived in terms of this new level.

The value of the above formulation to social psychology can be indicated by applying the adaptation-level theory to an analysis of certain propaganda techniques designed to change judgments of people. What would be the effect of publicizing *extreme* statements concerning any social issue? Let us choose racial prejudice, and let us assume that the stated opinions and beliefs available to an individual (opinions and beliefs that are publicly held by other people) range from an extremely prejudiced set to a rather mildly tolerant one. His adaptation level will then be such as to lead him to perceive a rather weak pro-democratic statement as "adequate, acceptable, or reasonable." Now, if the range is altered by adding extreme pro-democratic statements, it is highly likely that the individual will acquire a new adaptation level and he will judge as "acceptable and reasonable" a more strongly stated pro-democratic proposition than he formerly had. In other words, the sheer reiteration and publicity of strong, pro-democratic expressions can result in a shift in scale, or "framework," that can change a person's judgment in the direction of democracy.

Proposition IV

Objects or events that are close to each other in space or time or resemble each other tend to be apprehended as parts of a common structure.

If we are to know just why certain perceptions are organized together with other perceptions to make one cognitive structure, we must have some general understanding of what determines why an individual will organize the perceptions of object *A* with that of object *B* into one common structure rather than the perception of object *A* with that of object *C*. Why, for example, do some people have a cognitive structure in which socialism and Christianity are organized together, while other people have a cognitive structure in which socialism and athe-

ism are found together? Proposition IV attempts to indicate the major factors that determine the contents of a single structure.

PROXIMITY AND SIMILARITY

In visual perception, experimental literature is replete with demonstrations that proximity and similarity are important organizing factors. Figure 1*a*, which was used to illustrate the structural factors in perception, can serve to illustrate that in simple perception those objects which are close to each other in space (proximity) tend to be organized together in perception. Dot *A* is perceived as belonging to dot *B* rather than to dot *C* simply because *A* is closer to *B* than it is to *C*. A simple measurement of the physical distances among the different dots, everything else being equal, would permit us to predict, with a high degree of accuracy, which dots would be organized with which other dots. Similarly, Figure 1*b* can be used to illustrate the principle of similarity. Here, dot *A* will be organized with dot *B* rather than with dot *C* because *A* is more similar (in shape) to *B* than it is to *C*.

This does not mean that Proposition IV is a purely "structural" proposition, that we can predict which organization will eventuate in the cognitive field of the individual merely by a description of the physical stimulus or the physical relationships existing among the stimuli. The terms *proximate* and *similar* must always be understood, of course, in a psychological sense, i.e., as perceived by the individual. Two novel objects that are perceived as similar by one individual will not necessarily be perceived as similar by another individual and will therefore not give rise to the same cognitive structure. All the factors that we have discussed in the previous propositions will affect the perception of any object and therefore the nature of the resulting structure. The needs of the perceiver, his moods, his past training, etc., often play a determining role in defining what is proximate and what is similar. Thus, for example, a zoologist, because of his mental set and his previous cognitive organizations, might select out for perception, when

viewing a new species of animal, the presence or absence of mammarys. All animals having this anatomical feature would be perceived as "similar," and so, in the cognitive field of the zoologist, horses, human beings, and whales might be organized together. Other people might see no similarity among these instances of land animals, human beings with souls, and fish. Or take another illustration. The child who has just received a spanking at the hands of his father may organize "fathers, bullies, and castor oil" into one structure of "evil" because these three objects have been perceived with a common characteristic. Yet if his father had never spanked him, such an organization might never take place. The individual who has read about the Nazis' racial theories and who has experienced racial prejudice at the hands of an American court might also perceive the Nazi and the American policeman as similar.

Culture and similarity cues. The specific cues that are selected by us for major attention and will therefore determine our cognitive structures are, in turn, a function of our culture. Thus, if our culture and training emphasize signs of wealth as important cues to perceive at all times, we will perceive those cues most readily and will group people according to similarity of "wealth signs"—the kind of houses they live in, the automobiles they ride in (e.g., "the station-wagon set"), the schools they send their children to, etc. If our culture or educational influences emphasize pigment of skin, we will group people into Negroes and whites; if the Maori culture emphasizes the importance of tattoo marks, people who have similar tattoo marks will be seen as similar and will be organized together in the perceiver's cognitive field.

The similarities, obviously, need not rest on visual signs alone. If similar *labels*, or descriptive words, are applied to different people, there will be a tendency to organize those people together in perception. If different people or objects play the same frustrating role in our experience, we may tend to perceive them together.

Proximity. Proximity in time and space also works in very much the same way. The birth of twin cows occurring at the same time as a calamitous flood can be organized together as in-

dications of the work of the devil. An increase in the divorce rate of a country, occurring about the same time as the outbreak of war, can be organized into one picture of divine retribution.

PERCEIVING CAUSE AND EFFECT

Perhaps one of the most important kinds of cognitive structures is that involved in "casual organization," i.e., our perception of one object or event as a "cause" of another object or event. Some people perceive the Jews as the "cause" of depressions; others perceive the munitions manufacturer as the "cause" of war; still others perceive the current political administration as the "cause" of every national difficulty and calamity. What determines which cause will be organized together with which effect in our cognitive field? This is an extremely important question because so much of our social action is shaped by the way we perceive cause and effect.

Proximity and perception of cause and effect. Duncker, in his analysis of the thinking process,¹⁷ gives some compelling illustrations of how proximity may determine our perception of causations:

Someone comes home of an evening. A gust of wind slams the door shut behind him. At the same moment at the other end of the corridor, the light goes on in a room whose door is ajar. Although one knew ever so well that no causal connection exists between the door's blowing shut, and the light's going on, that rather someone in that room has turned on the light, by chance at exactly the same moment—still he would be unable to escape the compelling impression of causal relations . . . *the time and place of cause coincide phenomenally with the time and place of the effect.*

The point is not that all of our final or sophisticated statements of cause and effect are unequivocally determined by the temporal coincidence of two events but that in a new situation or in an ambiguous one, our immediate perception of cause

¹⁷ K. Duncker, "On Problem-Solving," *Psychological Monographs* 58, no. 5 (1945).

and effect is largely determined by this factor. Knowing this, we can predict fairly accurately the causal relations that will be perceived by the child and the unsophisticated—whether we are concerned with the individual's perception of the cause of a "licking," the cause of war, or the cause of economic depressions.

Similarity and the perception of cause and effect. For an illustration of the factor of similarity in the perception of causality, we can again quote from Duncker:

At least as important for man's dealing with causation as those spatial and temporal correspondences of *position* are certain correspondences of *form* between cause and effect. . . . An example of temporal correspondence of form: the rhythm of the sounds of knocking corresponds to the rhythm of the motions of knocking . . . heavy things make "heavy" noises, dainty things move daintily.

On a more complicated level, as in the perception of "human causation," Fritz Heider in his very helpful analysis of the perception of causality¹⁸ points out that the perception of responsibility (i.e., the attribution of a crime to a person) can be due to several types of similarity:

A crime can be blamed on a person because of a physical similarity "he looks as if he could have committed this crime." Or he can be held responsible for it because of "spiritual" similarity, that is, a similarity between a crime as a moral event and the natural disposition of the "responsible". . . .

In his discussion, Heider refers to the well-known experiment by Zillig to illustrate this point.¹⁹ In that experiment two groups of children performed calisthenic exercises before an audience of their classmates. One of the performing groups was composed of children who were almost uniformly disliked by their classmates, and the other group, of children who were liked. The experimenter had trained the liked group to make

¹⁸ F. Heider, "Social Perception and Phenomenal Causality," *Psychological Review* 51 (1944): 358-74.

¹⁹ M. Zillig, "Einstellung und Aussage," *Zeitschrift für Psychologie* 106 (1928): 58-106.

mistakes deliberately and the disliked group to perform the calisthenics letter-perfect. At the end of the two performances the experimenter discovered that the audience had "seen" the disliked group as having made the mistakes. A mistake, it appears, is much more likely to be organized together with disliked people than with liked people. As Heider says, "A bad act is easily connected with a bad person." The perception of cause and effect, in other words, is very definitely determined by our value judgments, our needs, our emotional reactions.

GENERAL COMMENTS

The politician and the propagandist seem frequently to illustrate in their actions their awareness of our Proposition IV. In a critical political or economic situation, the politician may seek to avoid taking power and refuse a seat in the government. Why? Because he knows that if his administration coincides with a disastrous national occurrence, both of these events (his being in power and the national calamity) will tend to be perceived by many people as causally related—no matter how conclusively he can demonstrate that he was not at fault. He will be perceived as having been responsible for the military defeat or the economic depression just as certainly as Duncker's man perceived the door's being shut as the cause of the light's going on. The Jew or the Republican or the Catholic, if he is regarded as a "bad" person, will be perceived as the cause of a "bad" event.

This tendency to organize objects or events together on the basis of proximity or similarity is a universal one. It is not something that only the poor logicians do. This does not mean that we can never change our perceptions of causality and integrate objects and events originally perceived as unlike into a common structure, but it does mean that initially and prior to any corrections, our cognitive structures will be organized in terms of objects or events which are perceived as similar or in proximity.

Summary

The fundamental importance of perception for social psychology is clearly indicated when we realize that all of man's molar action is shaped by his "private" conceptions of the world. This sets two major problems for the social psychologist: (1) the description of the social world as perceived by the specific individual (or individuals) whose social behavior we are interested in understanding, and (2) the discovery of general principles of perception and cognition.

Without the description indicated in (1) above, the psychologist cannot interpret correctly the formalized expressions of beliefs and attitudes (whether verbally obtained or through observation of action) of the people whom he is studying. It is at this point that many current "attitude" and "opinion" studies are limited in their usefulness.

WALTER LIPPMANN

*The World Outside
and the Pictures in Our Heads*

Lippmann is not a scholar who has spent his life in universities. He has been a distinguished editor and one of the world's most respected political columnists. Therefore, in this chapter he is able to look at the mass media from inside. This, the first chapter in his little book on *Public Opinion*, which was published in 1921, has come to be recognized as a classic, and still reads freshly after fifty years. He is concerned, in this selection, with somewhat the same problem that the Langs explored when they studied the MacArthur Day parade—as he puts it, “how *indirectly* we know the environment in which nevertheless we live.” “The world that we have to deal with politically,” he concludes, “is out of reach, out of sight, out of mind. It has to be explored, reported, and imagined.” And he is concerned, as are the Langs, over how able the media are to report this world, and the constraints upon them as they try to serve as ears and eyes for their audiences. This chapter is published by permission of Walter Lippmann and the Macmillan Company, holders of the copyright, New York, 1921, 1936.

I

THERE IS AN ISLAND in the ocean where in 1914 a few Englishmen, Frenchmen, and Germans lived. No cable reaches that island, and the British mail steamer comes but once in sixty days. In September it had not yet come, and the islanders were still talking about the latest newspaper which told about the approaching trial of Madame Caillaux for the shooting of Gaston Calmette. It was, therefore, with more than usual eagerness that the whole colony assembled at the quay on a day in mid-September to hear from the captain what the verdict had been. They learned that for over six weeks now those of them who were English and those of them who were French had been fighting in behalf of the sanctity of treaties against those of them who were Germans. For six strange weeks they had acted as if they were friends, when in fact they were enemies.

But their plight was not so different from that of most of the

population of Europe. They had been mistaken for six weeks; on the continent the interval may have been only six days or six hours. There was an interval. There was a moment when the picture of Europe, on which men were conducting their business as usual, did not in any way correspond to the Europe which was about to make a jumble of their lives. There was a time for each man when he was still adjusted to an environment that no longer existed. All over the world as late as July 25, men were making goods that they would not be able to ship, buying goods they would not be able to import, planning careers, contemplating enterprises, entertaining hopes and expectations, all in the belief that the world as known was the world as it was. Men were writing books describing that world. They trusted the picture in their heads. And then, over four years later, on a Thursday morning, came the news of an armistice, and people gave vent to their unutterable relief that the slaughter was over. Yet in the five days before the real armistice came, though the end of the war had been celebrated, several thousand young men died on the battlefields.

Looking back we can see how indirectly we know the environment in which nevertheless we live. We can see that the news of it comes to us now fast, now slowly; but that whatever we believe to be a true picture, we treat as if it were the environment itself. It is harder to remember that about the beliefs upon which we are now acting, but in respect to other peoples and other ages we flatter ourselves that it is easy to see when they were in deadly earnest about ludicrous pictures of the world. We insist, because of our superior hindsight, that the world as they needed to know it, and the world as they did know it, were often two quite contradictory things. We can see, too, that while they governed and fought, traded and reformed in the world as they imagined it to be, they produced results, or failed to produce any, in the world as it was. They started for the Indies and found America. They diagnosed evil and hanged old women. They thought they could grow rich by always selling and never buying. A caliph, obeying what he conceived to be the will of Allah, burned the library at Alexandria.

Writing about the year 389, St. Ambrose stated the case for

the prisoner in Plato's cave who resolutely declines to turn his head. "To discuss the nature and position of the earth does not help us in our hope of the life to come. It is enough to know what Scripture states. 'That He hung up the earth upon nothing' (Job 36:7). Why then argue whether He hung it up in air or upon the water, and raise a controversy as to how the thin air could sustain the earth; or why, if upon the waters, the earth does not go crashing down to the bottom? . . . Not because the earth is in the middle, as if suspended on even balance, but because the majesty of God constrains it by the law of His will, does it endure stable upon the unstable and the void." ¹

It does not help us in our hope of the life to come. It is enough to know what Scripture states. Why then argue? But a century and a half after St. Ambrose, opinion was still troubled, on this occasion by the problem of the Antipodes. A monk named Cosmas, famous for his scientific attainments, was therefore deputed to write a Christian topography, or "Christian Opinion concerning the World." ² It is clear that he knew exactly what was expected of him, for he based all his conclusions on the Scriptures as he read them. It appears, then, that the world is a flat parallelogram, twice as broad from east to west as it is long from north to south. In the center is the earth surrounded by ocean, which is in turn surrounded by another earth, where men lived before the deluge. This other earth was Noah's port of embarkation. In the north is a high conical mountain around which revolve the sun and moon. When the sun is behind the mountain it is night. The sky is glued to the edges of the outer earth. It consists of four high walls which meet in a concave roof, so that the earth is the floor of the universe. There is an ocean on the other side of the sky, constituting the "waters that are above the firmament." The space between the celestial ocean and the ultimate roof of the universe belongs to the blessed. The space between the earth and sky is inhabited by the angels. Finally, since St. Paul said that all

¹ Hexaëmeron, i. cap. 6, quoted in Henry Osborn Taylor, *The Mediæval Mind*, vol. 1, p. 73.

² William E. Lecky, *Rationalism in Europe*, vol. 1, pp. 276-78.

men are made to live upon the "face of the earth," how could they live on the back where the Antipodes are supposed to be? "With such a passage before his eyes, a Christian, we are told, should not 'even speak of the Antipodes.'" ³

Far less should he go to the Antipodes; nor should any Christian prince give him a ship to try; nor would any pious mariner wish to try. For Cosmas there was nothing in the least absurd about his map. Only by remembering his absolute conviction that this was the map of the universe can we begin to understand how he would have dreaded Magellan or Peary or the aviator who risked a collision with the angels and the vault of heaven by flying seven miles up in the air. In the same way we can best understand the furies of war and politics by remembering that almost the whole of each party believes absolutely in its picture of the opposition, that it takes as fact, not what is, but what it supposes to be the fact. And that therefore, like Hamlet, it will stab Polonius behind the rustling curtain, thinking him the king, and perhaps like Hamlet add:

"Thou wretched, rash, intruding fool, farewell!
I took thee for thy better; take thy fortune."

II

Great men, even during their lifetimes, are usually known to the public only through a fictitious personality. Hence the modicum of truth in the old saying that no man is a hero to his valet. There is only a modicum of truth, for the valet and the private secretary are often immersed in the fiction themselves. Royal personages are, of course, constructed personalities. Whether they themselves believe in their public character, or whether they merely permit the chamberlain to stage-manage it, there are at least two distinct selves, the public and regal self, the private and human. The biographies of great people fall more or less readily into the histories of these two selves. The official biographer reproduces the public life, the revealing memoir the other. The Charnwood Lincoln, for example,

³ Ibid.

is a noble portrait, not of an actual human being, but of an epic figure, replete with significance, who moves on much the same level of reality as Aeneas or St. George. Oliver's Hamilton is a majestic abstraction, the sculpture of an idea, "an essay" as Oliver himself calls it, "on American union." It is a formal monument to the statecraft of federalism, hardly the biography of a person. Sometimes people create their own facade when they think they are revealing the interior scene. The Repington diaries and Margot Asquith's are a species of self-portraiture in which the intimate detail is most revealing as an index of how the authors like to think about themselves.

But the most interesting kind of portraiture is that which arises spontaneously in people's minds. When Victoria came to the throne, says Strachey,⁴ "among the outside public there was a great wave of enthusiasm. Sentiment and romance were coming into fashion; and the spectacle of the little girl-queen, innocent, modest, with fair hair and pink cheeks, driving through her capital, filled the hearts of the beholders with raptures of affectionate loyalty. What, above all, struck everybody with overwhelming force was the contrast between Queen Victoria and her uncles. The nasty old men, debauched and selfish, pig-headed and ridiculous, with their perpetual burden of debts, confusions, and disreputabilities—they had vanished like the snows of winter and here at last, crowned and radiant, was the spring."

M. Jean de Pierrefeu⁵ saw hero worship at first hand, for he was an officer on Joffre's staff at the moment of that soldier's greatest fame:

For two years, the entire world paid an almost divine homage to the victor of the Marne. The baggage-master literally bent under the weight of the boxes, of the packages and letters which unknown people sent him with a frantic testimonial of their admiration. I think that outside of General Joffre, no commander in the war has been able to realize a comparable idea of what glory is. They sent him boxes of candy from all

⁴ Lytton Strachey, *Queen Victoria*, p. 72.

⁵ Jean de Pierrefeu, *G. Q. G. Trois ans au Grand Quartier Général*, pp.

the great confectioners of the world, boxes of champagne, fine wines of every vintage, fruits, game, ornaments and utensils, clothes, smoking materials, inkstands, paperweights. Every territory sent its speciality. The painter sent his picture, the sculptor his statuette, the dear old lady a comforter or socks, the shepherd in his hut carved a pipe for his sake. All the manufacturers of the world who were hostile to Germany shipped their products, Havana its cigars, Portugal its port wine. I have known a hairdresser who had nothing better to do than to make a portrait of the General out of hair belonging to persons who were dear to him; a professional penman had the same idea, but the features were composed of thousands of little phrases in tiny characters which sang the praise of the General. As to letters, he had them in all scripts, from all countries, written in every dialect, affectionate letters, grateful, overflowing with love, filled with adoration. They called him Savior of the World, Father of his Country, Agent of God, Benefactor of Humanity, etc. . . . And not only Frenchmen, but Americans, Argentinians, Australians, etc. etc. . . . Thousands of little children, without their parents' knowledge, took pen in hand and wrote to tell him their love: most of them called him Our Father. And there was poignancy about their effusions, their adoration, these sighs of deliverance that escaped from thousands of hearts at the defeat of barbarism. To all these naïf little souls, Joffre seemed like St. George crushing the dragon. Certainly he incarnated for the conscience of mankind the victory of good over evil, of light over darkness.

Lunatics, simpletons, the half-crazy and the crazy turned their darkened brains toward him as toward reason itself. I have read the letter of a person living in Sydney, who begged the General to save him from his enemies; another, a New Zealander, requested him to send some soldiers to the house of a gentleman who owed him ten pounds and would not pay.

Finally, some hundreds of young girls, overcoming the timidity of their sex, asked for engagements, their families not to know about it; others wished only to serve him.

This ideal Joffre was compounded out of the victory won by him, his staff and his troops, the despair of the war, the personal sorrows, and the hope of future victory. But beside hero worship there is the exorcism of devils. By the same mechanism

through which heroes are incarnated, devils are made. If everything good was to come from Joffre, Foch, Wilson, or Roosevelt, everything evil originated in the Kaiser Wilhelm, Lenin, and Trotsky. They were as omnipotent for evil as the heroes were omnipotent for good. To many simple and frightened minds there was no political reverse, no strike, no obstruction, no mysterious death or mysterious conflagration anywhere in the world of which the causes did not wind back to these personal sources of evil.

III

Worldwide concentration of this kind on a symbolic personality is rare enough to be clearly remarkable, and every author has a weakness for the striking and irrefutable example. The vivisection of war reveals such examples, but it does not make them out of nothing. In a more normal public life, symbolic pictures are no less governant of behavior, but each symbol is far less inclusive because there are so many competing ones. Not only is each symbol charged with less feeling because at most it represents only a part of the population, but even within that part there is infinitely less suppression of individual difference. The symbols of public opinion, in times of moderate security, are subject to check and comparison and argument. They come and go, coalesce and are forgotten, never organizing perfectly the emotion of the whole group. There is, after all, just one human activity left in which whole populations accomplish the *union sacrée*. It occurs in those middle phases of a war when fear, pugnacity, and hatred have secured complete dominion of the spirit, either to crush every other instinct or to enlist it, and before weariness is felt.

At almost all other times, and even in war when it is deadlocked, a sufficiently greater range of feelings is aroused to establish conflict, choice, hesitation, and compromise. The symbolism of public opinion usually bears, as we shall see,⁶ the marks of this balancing of interest. Think, for example, of how rapidly, after the armistice, the precarious and by no means

⁶ Part V.

successfully established symbol of Allied unity disappeared, how it was followed almost immediately by the breakdown of each nation's symbolic picture of the other: Britain the Defender of Public Law, France watching at the Frontier of Freedom, America the Crusader. And think then of how within each nation the symbolic picture of itself frayed out, as party and class conflict and personal ambition began to stir postponed issues. And then of how the symbolic pictures of the leaders gave way as, one by one, Wilson, Clemenceau, and Lloyd George ceased to be the incarnation of human hope and became merely the negotiators and administrators for a disillusioned world.

Whether we regret this as one of the soft evils of peace or applaud it as a return to sanity is obviously no matter here. Our first concern with fictions and symbols is to forget their value to the existing social order, and to think of them simply as an important part of the machinery of human communication. Now in any society that is not completely self-contained in its interests and so small that everyone can know all about everything that happens, ideas deal with events that are out of sight and hard to grasp. Miss Sherwin of Gopher Prairie⁷ is aware that a war is raging in France and tries to conceive it. She has never been to France, and certainly she has never been along what is now the battlefield. Pictures of French and German soldiers she has seen, but it is impossible for her to imagine three million men. No one, in fact, can imagine them, and the professionals do not try. They think of them as, say, two hundred divisions. But Miss Sherwin has no access to the order of battle maps, and so if she is to think about the war, she fastens upon Joffre and the Kaiser as if they were engaged in a personal duel. Perhaps if you could see what she sees with her mind's eye, the image in its composition might be not unlike an eighteenth-century engraving of a great soldier. He stands there boldly unruffled and more than life size, with a shadowy army of tiny little figures winding off into the landscape behind. Nor it seems are great men oblivious to these expecta-

⁷ See Sinclair Lewis, *Main Street*.

tions. M. de Pierrefeu tells of a photographer's visit to Joffre. The General was in his "middle class office, before the worktable without papers, where he sat down to write his signature. Suddenly it was noticed that there were no maps on the walls. But since according to popular ideas it is not possible to think of a general without maps, a few were placed in position for the picture, and removed soon afterwards." ⁸

The only feeling that anyone can have about an event he does not experience is the feeling aroused by his mental image of that event. That is why until we know what others think they know, we cannot truly understand their acts. I have seen a young girl, brought up in a Pennsylvania mining town, plunged suddenly from entire cheerfulness into a paroxysm of grief when a gust of wind cracked the kitchen window-pane. For hours she was inconsolable, and to me incomprehensible. But when she was able to talk, it transpired that if a window-pane broke it meant that a close relative had died. She was, therefore, mourning for her father, who had frightened her into running away from home. The father was, of course, quite thoroughly alive, as a telegraphic inquiry soon proved. But until the telegram came, the cracked glass was an authentic message to that girl. Why it was authentic only a prolonged investigation by a skilled psychiatrist could show. But even the most casual observer could see that the girl, enormously upset by her family troubles, had hallucinated a complete fiction out of one external fact, a remembered superstition, and a turmoil of remorse, fear, and love for her father.

Abnormality in these instances is only a matter of degree. When an attorney general, who has been frightened by a bomb exploded on his doorstep, convinces himself by the reading of revolutionary literature that a revolution is to happen on the first of May, 1920, we recognize that much the same mechanism is at work. The war, of course, furnished many examples of this pattern: the casual fact, the creative imagination, the will to believe, and, out of these three elements, a counterfeit of reality to which there was a violent instinctive response. For it is clear

⁸ de Pierrefeu, G. Q. G. *Trois ans au Grand Quartier Général*, p. 99.

enough that under certain conditions men respond as powerfully to fictions as they do to realities, and that in many cases they help to create the very fictions to which they respond. Let him cast the first stone who did not believe in the Russian army that passed through England in August, 1914, did not accept any tale of atrocities without direct proof, and never saw a plot, a traitor, or a spy where there was none. Let him cast a stone who never passed on as the real inside truth what he had heard someone say who knew no more than he did.

In all these instances we must note particularly one common factor. It is the insertion between man and his environment of a pseudo-environment. To that pseudo-environment his behavior is a response. But because it is behavior, the consequences, if they are acts, operate not in the pseudo-environment where the behavior is stimulated, but in the real environment where action eventuates. If the behavior is not a practical act, but what we call roughly thought and emotion, it may be a long time before there is any noticeable break in the texture of the fictitious world. But when the stimulus of the pseudo-fact results in action on things or other people, contradiction soon develops. Then comes the sensation of butting one's head against a stone wall, of learning by experience, and witnessing Herbert Spencer's tragedy of the murder of a Beautiful Theory by a Gang of Brutal Facts, the discomfort in short of a maladjustment. For certainly, at the level of social life, what is called the adjustment of man to his environment takes place through the medium of fictions.

By fictions I do not mean lies. I mean a representation of the environment which is in lesser or greater degree made by man himself. The range of fiction extends all the way from complete hallucination to the scientist's perfectly self-conscious use of a schematic model, or his decision that for his particular problem accuracy beyond a certain number of decimal places is not important. A work of fiction may have almost any degree of fidelity, and so long as the degree of fidelity can be taken into account, fiction is not misleading. In fact, human culture is very largely the selection, the rearrangement, the tracing of patterns upon, and the stylizing of, what William James called

"the random irradiations and resettlements of our ideas." ⁹ The alternative to the use of fictions is direct exposure to the ebb and flow of sensation. That is not a real alternative, for however refreshing it is to see at times with a perfectly innocent eye, innocence itself is not wisdom, though a source and corrective of wisdom.

For the real environment is altogether too big, too complex, and too fleeting for direct acquaintance. We are not equipped to deal with so much subtlety, so much variety, so many permutations and combinations. And although we have to act in that environment, we have to reconstruct it on a simpler model before we can manage with it. To traverse the world men must have maps of the world. Their persistent difficulty is to secure maps on which their own need, or someone else's need, has not sketched in the coast of Bohemia.

IV

The analyst of public opinion must begin, then, by recognizing the triangular relationship between the scene of action, the human picture of that scene, and the human response to that picture working itself out upon the scene of action. It is like a play suggested to the actors by their own experience, in which the plot is transacted in the real lives of the actors and not merely in their stage parts. The moving picture often emphasizes with great skill this double drama of interior motive and external behavior. Two men are quarreling, ostensibly about some money, but their passion is inexplicable. Then the picture fades out and what one or the other of the two men sees with his mind's eye is reenacted. Across the table they were quarreling about money. In memory they are back in their youth when the girl jilted him for the other man. The exterior drama is explained: the hero is not greedy; the hero is in love.

A scene not so different was played in the U.S. Senate. At breakfast on the morning of September 29, 1919, some of the senators read a news dispatch in the *Washington Post* about

⁹ William James, *Principles of Psychology*, Vol. II, p. 638.

the landing of American marines on the Dalmatian coast. The newspaper said:

FACTS NOW ESTABLISHED

The following important facts appear already *established*. The orders to Rear Admiral Andrews commanding the American naval forces in the Adriatic, came from the British Admiralty via the War Council and Rear Admiral Knapps in London. The approval or disapproval of the American Navy Department was not asked. . . .

WITHOUT DANIELS' KNOWLEDGE

Mr. Daniels was admittedly placed in a peculiar position when cables reached here stating that the forces over which he is presumed to have exclusive control were carrying on what amounted to naval warfare without his knowledge. It was fully realized that the *British Admiralty might desire to issue orders to Rear Admiral Andrews* to act on behalf of Great Britain and her Allies, because the situation required sacrifice on the part of some nation if D'Annunzio's followers were to be held in check.

It was further realized that *under the new league of nations plan foreigners would be in a position to direct American Naval forces in emergencies* with or without the consent of the American Navy Department . . . [my italics].

The first senator to comment is Knox of Pennsylvania. Indignantly he demands investigation. In Brandegee of Connecticut, who spoke next, indignation has already stimulated credulity. Where Knox indignantly wishes to know if the report is true, Brandegee, a half a minute later, would like to know what would have happened if Marines had been killed. Knox, interested in the question, forgets that he asked for an inquiry, and replies. If American Marines had been killed, it would be war. The mood of the debate is still conditional. Debate proceeds. McCormick of Illinois reminds the Senate that the Wilson administration is prone to the waging of small unauthorized wars. He repeats Theodore Roosevelt's quip about "waging peace." More debate. Brandegee notes that the Marines acted "under orders of a Supreme Council sitting some-

where," but he cannot recall who represents the United States on that body. The Supreme Council is unknown to the Constitution of the United States. Therefore Senator New of Indiana submits a resolution calling for the facts.

So far the senators still recognize vaguely that they are discussing a rumor. Being lawyers they still remember some of the forms of evidence. But as red-blooded men they already experience all the indignation which is appropriate to the fact that American Marines have been ordered into war by a foreign government and without the consent of Congress. Emotionally they want to believe it, because they are Republicans fighting the League of Nations. This arouses the Democratic leader, Senator Hitchcock of Nebraska. He defends the Supreme Council: it was acting under the war powers. Peace has not yet been concluded because the Republicans are delaying it. Therefore the action was necessary and legal. Both sides now assume that the report is true, and the conclusions they draw are the conclusions of their partisanship. Yet this extraordinary assumption is in a debate over a resolution to investigate the truth of the assumption. It reveals how difficult it is, even for trained lawyers, to suspend response until the returns are in. The response is instantaneous. The fiction is taken for truth because the fiction is badly needed.

A few days later an official report showed that the Marines were not landed by order of the British government or of the Supreme Council. They had not been fighting the Italians. They had been landed at the request of the Italian government to protect Italians, and the American commander had been officially thanked by the Italian authorities. The Marines were not at war with Italy. They had acted according to an established international practice which had nothing to do with the League of Nations.

The scene of action was the Adriatic. The picture of that scene in the senators' heads at Washington was furnished, in this case probably with intent to deceive, by a man who cared nothing about the Adriatic, but much about defeating the League. To this picture the Senate responded by a strengthening of its partisan differences over the League.

V

Whether in this particular case the Senate was above or below its normal standard, it is not necessary to decide. Nor whether the Senate compares favorably with the House, or with other parliaments. At the moment, I should like to think only about the worldwide spectacle of men acting upon their environment, moved by stimuli from their pseudo-environments. For when full allowance has been made for deliberate fraud, political science has still to account for such facts as two nations attacking one another, each convinced that it is acting in self-defense, or two classes at war, each certain that it speaks for the common interest. They live, we are likely to say, in different worlds. More accurately, they live in the same world, but they think and feel in different ones.

It is to these special worlds, it is to these private or group (or class, or provincial, or occupational, or national, or sectarian) artifacts, that the political adjustment of mankind in the Great Society takes place. Their variety and complication are impossible to describe. Yet these fictions determine a very great part of men's political behavior. We must think of perhaps fifty sovereign parliaments consisting of at least a hundred legislative bodies. With them belong at least fifty hierarchies of provincial and municipal assemblies which, with their executive, administrative, and legislative organs, constitute formal authority on earth. But that does not begin to reveal the complexity of political life. For in each of these innumerable centers of authority there are parties, and these parties are themselves hierarchies with their roots in classes, sections, cliques, and clans; and within these are the individual politicians, each the personal center of a web of connection and memory and fear and hope.

Somehow or other, for reasons often necessarily obscure, as the result of domination or compromise or a logroll, there emerge from these political bodies commands, which set armies in motion or make peace, conscript life, tax, exile, imprison, protect property or confiscate it, encourage one kind of enterprise and discourage another, facilitate immigration or obstruct

it, improve communication or censor it, establish schools, build navies, proclaim "policies" and "destiny," raise economic barriers, make property or unmake it, bring one people under the rule of another, or favor one class against another. For each of these decisions some view of the facts is taken to be conclusive, some view of the circumstances is accepted as the basis of inference and as the stimulus of feeling. What view of the facts, and why that one?

And yet even this does not begin to exhaust the real complexity. The formal political structure exists in a social environment, where there are innumerable large and small corporations and institutions, voluntary and semi-voluntary associations, national, provincial, urban, and neighborhood groupings, which often as not make the decision that the political body registers. On what are these decisions based?

"Modern society," says Mr. Chesterton,

is intrinsically insecure because it is based on the notion that all men will do the same thing for different reasons. . . . And as within the head of any convict may be the hell of a quite solitary crime, so in the house or under the hat of any suburban clerk may be the limbo of a quite separate philosophy. The first man may be a complete Materialist and feel his own body as a horrible machine manufacturing his own mind. He may listen to his thoughts as to the dull ticking of a clock. The man next door may be a Christian Scientist and regard his own body as somehow rather less substantial than his own shadow. He may come almost to regard his own arms and legs as delusions like moving serpents in the dream of delirium tremens. The third man in the street may not be a Christian Scientist but, on the contrary, a Christian. He may live in a fairy tale as his neighbors would say; a secret but solid fairy tale full of the faces and presences of unearthly friends. The fourth man may be a theosophist, and only too probably a vegetarian; and I do not see why I should not gratify myself with the fancy that the fifth man is a devil worshiper. . . . Now whether or not this sort of variety is valuable, this sort of unity is shaky. To expect that all men for all time will go on thinking different things, and yet doing the same things, is a doubtful speculation. It is not founding society on a communion, or even on a conven-

tion, but rather on a coincidence. Four men may meet under the same lamp post; one to paint it pea green as part of a great municipal reform; one to read his breviary in the light of it; one to embrace it with accidental ardour in a fit of alcoholic enthusiasm; and the last merely because the pea green post is a conspicuous point of rendezvous with his young lady. But to expect this to happen night after night is unwise.¹⁰

For the four men at the lamp post substitute the governments, parties, corporations, societies, social sets, trades and professions, universities, sects, and nationalities of the world. Think of the legislator voting a statute that will affect distant peoples, a statesman coming to a decision. Think of the peace conference reconstituting the frontiers of Europe, an ambassador in a foreign country trying to discern the intentions of his own government and of the foreign government, a promoter working a concession in a backward country, an editor demanding a war, a clergyman calling on the police to regulate amusement, a club lounging-room making up its mind about a strike, a sewing circle preparing to regulate the schools, nine judges deciding whether a legislature in Oregon may fix the working hours of women, a Cabinet meeting to decide on the recognition of a government, a party convention choosing a candidate and writing a platform, twenty-seven million voters casting their ballots, an Irishman in Cork thinking about an Irishman in Belfast, a Third International planning to reconstruct the whole of human society, a board of directors confronted with a set of their employees' demands, a boy choosing a career, a merchant estimating supply and demand for the coming season, a speculator predicting the course of the market, a banker deciding whether to put credit behind a new enterprise, the advertiser, the reader of advertisements. . . . Think of the different sorts of Americans thinking about their notions of "the British Empire" or "France" or "Russia" or "Mexico." It is not so different from Chesterton's four men at the pea-green lamp post.

¹⁰ G. K. Chesterton, "The Mad Hatter and the Sane Householder," *Vanity Fair* (January, 1921), p. 54.

VI

And so before we involve ourselves in the jungle of obscurities about the innate differences of men, we shall do well to fix our attention upon the extraordinary differences in what men know of the world.¹¹ I do not doubt that there are important biological differences. Since man is an animal it would be strange if there were not. But as rational beings it is worse than shallow to generalize at all about comparative behavior until there is a measurable similarity between the environments to which behavior is a response.

The pragmatic value of this idea is that it introduces a much-needed refinement into the ancient controversy about nature and nurture, innate quality and environment. For the pseudo-environment is a hybrid compounded of "human nature" and "conditions." To my mind it shows the uselessness of pontificating about what man is and always will be from what we observe man to be doing, or about what are the necessary conditions of society. For we do not know how men would behave in response to the facts of the Great Society. All that we really know is how they behave in response to what can fairly be called a most inadequate picture of the Great Society. No conclusion about man or the Great Society can honestly be made on evidence like that.

This, then, will be the clue to our inquiry. We shall assume that what each man does is based not on direct and certain knowledge, but on pictures made by himself or given to him. If his atlas tells him that the world is flat, he will not sail near what he believes to be the edge of our planet for fear of falling off. If his maps include a fountain of eternal youth, a Ponce de Leon will go in quest of it. If someone digs up yellow dirt that looks like gold, he will for a time act exactly as if he had found gold. The way in which the world is imagined determines at any particular moment what men will do. It does not determine what they will achieve. It determines their efforts, their

¹¹ Cf. Wallas, *Our Social Heritage*, pp. 77ff.

feelings, their hopes, not their accomplishments and results. The very men who most loudly proclaim their "materialism" and their contempt for "ideologues," the Marxian communists, place their entire hope on what? On the formation by propaganda of a class-conscious group. But what is propaganda, if not the effort to alter the picture to which men respond, to substitute one social pattern for another? What is class consciousness but a way of realizing the world? National consciousness but another way? And Giddings's consciousness of kind, but a process of believing that we recognize among the multitude certain ones marked as our kind?

Try to explain social life as the pursuit of pleasure and the avoidance of pain. You will soon be saying that the hedonist begs the question, for even supposing that man does pursue these ends, the crucial problem of why he thinks one course rather than another likely to produce pleasure is untouched. Does the guidance of man's conscience explain? How, then, does he happen to have the particular conscience which he has? The theory of economic self-interest? But how do men come to conceive their interest in one way rather than another? The desire for security, or prestige, or domination, or what is vaguely called self-realization? How do men conceive their security; what do they consider prestige; how do they figure out the means of domination; or what is the notion of self which they wish to realize? Pleasure, pain, conscience, acquisition, protection, enhancement, and mastery are undoubtedly names for some of the ways people act. There may be instinctive dispositions which work toward such ends. But no statement of the end, or any description of the tendencies to seek it, can explain the behavior which results. The very fact that men theorize at all is proof that their pseudo-environments, their interior representations of the world, are a determining element in thought, feeling, and action. For if the connection between reality and human response were direct and immediate, rather than indirect and inferred, indecision and failure would be unknown, and (if each of us fitted as snugly into the world as the child in the womb), Bernard Shaw would not have been able

to say that except for the first nine months of its existence no human being manages its affairs as well as a plant.

The chief difficulty in adapting the psychoanalytic scheme to political thought arises in this connection. The Freudians are concerned with the maladjustment of distinct individuals to other individuals and to concrete circumstances. They have assumed that if internal derangements could be straightened out, there would be little or no confusion about what is the obviously normal relationship. But public opinion deals with indirect, unseen, and puzzling facts, and there is nothing obvious about them. The situations to which public opinions refer are known only as opinions. The psychoanalyst, on the other hand, almost always assumes that the environment is knowable, and if not knowable then at least bearable, to any unclouded intelligence. This assumption of his is the problem of public opinion. Instead of taking for granted an environment that is readily known, the social analyst is most concerned in studying how the larger political environment is conceived, and how it can be conceived more successfully. The psychoanalyst examines the adjustment to an *X*, called by him the environment; the social analyst examines the *X*, called by him the pseudo-environment.

He is, of course, permanently and constantly in debt to the new psychology, not only because when rightly applied it so greatly helps people to stand on their own feet, come what may, but because the study of dreams, fantasy, and rationalization has thrown light on how the pseudo-environment is put together. But he cannot assume as his criterion either what is called a "normal biological career"¹² within the existing social order, or a career "freed from religious suppression and dogmatic conventions" outside.¹³ What for a sociologist is a normal social career? Or one freed from suppressions and conventions? Conservative critics do, to be sure, assume the first, and romantic ones the second. But in assuming them they are taking the whole world for granted. They are saying in effect ei-

¹² Edward J. Kempf, *Psychopathology*, p. 116.

¹³ *Ibid.*, p. 151.

ther that society is the sort of thing which corresponds to their idea of what is normal, or the sort of thing which corresponds to their idea of what is free. Both ideas are merely public opinions, and while the psychoanalyst as physician may perhaps assume them, the sociologist may not take the products of existing public opinion as criteria by which to study public opinion.

VII

The world that we have to deal with politically is out of reach, out of sight, out of mind. It has to be explored, reported, and imagined. Man is no Aristotelian god contemplating all existence at one glance. He is the creature of an evolution who can just about span a sufficient portion of reality to manage his survival, and snatch what on the scales of time are but a few moments of insight and happiness. Yet this same creature has invented ways of seeing what no naked eye could see, of hearing what no ear could hear, of weighing immense masses and infinitesimal ones, of counting and separating more items than he can individually remember. He is learning to see with his mind vast portions of the world that he could never see, touch, smell, hear, or remember. Gradually he makes for himself a trustworthy picture inside his head of the world beyond his reach.

Those features of the world outside which have to do with the behavior of other human beings, insofar as that behavior crosses ours, is dependent upon us, or is interesting to us, we call roughly public affairs. The pictures inside the heads of these human beings, the pictures of themselves, of others, of their needs, purposes, and relationships, are their public opinions. Those pictures which are acted upon by groups of people, or by individuals acting in the name of groups, are Public Opinion with capital letters. And so in the chapters which follow we shall inquire first into some of the reasons why the picture inside so often misleads men in their dealings with the world outside. Under this heading we shall consider first the chief factors which limit their access to the facts. They are

the artificial censorships, the limitations of social contact, the comparatively meager time available in each day for paying attention to public affairs, the distortion arising because events have to be compressed into very short messages, the difficulty of making a small vocabulary express a complicated world, and finally the fear of facing those facts which would seem to threaten the established routine of men's lives.

The analysis then turns from these more or less external limitations to the question of how this trickle of messages from the outside is affected by the stored-up images, the preconceptions and prejudices which interpret, fill them out, and in their turn powerfully direct the play of our attention and our vision itself. From this it proceeds to examine how in the individual person the limited messages from outside, formed into a pattern of stereotypes, are identified with his own interests as he feels and conceives them. In the succeeding sections it examines how opinions are crystallized into what is called public opinion, how a national will, a group mind, a social purpose, or whatever you choose to call it, is formed.

The first five parts constitute the descriptive section of the book. There follows an analysis of the traditional democratic theory of public opinion. The substance of the argument is that democracy in its original form never seriously faced the problem which arises because the pictures inside people's heads do not automatically correspond with the world outside. And then, because the democratic theory is under criticism by socialist thinkers, there follows an examination of the most advanced and coherent of these criticisms, as made by the English Guild Socialists. My purpose here is to find out whether these reformers take into account the main difficulties of public opinion. My conclusion is that they ignore the difficulties as completely as did the original democrats, because they, too, assume, and in a much more complicated civilization, that somehow mysteriously there exists in the hearts of men a knowledge of the world beyond their reach.

I argue that representative government, either in what is ordinarily called politics, or in industry, cannot be worked successfully, no matter what the basis of election, unless there is

an independent, expert organization for making the unseen facts intelligible to those who have to make the decisions. I attempt, therefore, to argue that the serious acceptance of the principle that personal representation must be supplemented by representation of the unseen facts would alone permit a satisfactory decentralization and allow us to escape from the intolerable and unworkable fiction that each of us must acquire a competent opinion about all public affairs. It is argued that the problem of the press is confused because the critics and the apologists expect the press to realize this fiction, expect it to make up for all that was not foreseen in the theory of democracy, and that the readers expect this miracle to be performed at no cost or trouble to themselves. The newspapers are regarded by democrats as a panacea for their own defects, whereas analysis of the nature of news and of the economic basis of journalism seems to show that the newspapers necessarily and inevitably reflect and, therefore, in greater or lesser measure, intensify, the defective organization of public opinion. My conclusion is that public opinions must be organized for the press if they are to be sound, not by the press as is the case today. This organization I conceive to be in the first instance the task of a political science that has won its proper place as formulator, in advance of real decision, instead of apologist, critic, or reporter after the decision has been made. I try to indicate that the perplexities of government and industry are conspiring to give political science this enormous opportunity to enrich itself and to serve the public. And, of course, I hope that these pages will help a few people to realize that opportunity more vividly, and therefore to pursue it more consciously.

EUNICE COOPER AND
MARIE JAHODA

*The Evasion of Propaganda:
How Prejudiced People Respond
to Anti-Prejudice Propaganda*

When an individual comes up against some communication that attacks one of his strongly held beliefs or values, how does he handle it? This is the central question of the "Mr. Biggott" study, reported in the following pages. The study grew out of an attempt to use mass communication in such a way as to make people laugh at their own prejudices and thus be able to retreat more gracefully from some of them. A series of cartoons was created about a character named Mr. Biggott, who displayed his prejudice in a series of actions which seemed at least extraordinary and to some people hilarious. For example, he refused to let the hospital staff use anything except blue blood for a transfusion into him. The result of this campaign was not exactly as expected. If anything, it left the audience *more* prejudiced. Instead of laughing at many of the cartoons, they approved them or missed the point or misunderstood. In the following article, Jahoda and Cooper analyze some of the process of evasion and misperception that must have taken place. The article appeared originally in and was copyrighted by the *Journal of Psychology* in 1947, and is reprinted here by permission of the Journal Press and the authors. Dr. Jahoda is on the staff of Sussex University, England, and Dr. Cooper is living in New York.

Propaganda Evasion as a Problem

COMMUNICATION RESEARCH points up the fact that it is difficult in general for a communication to reach people who are not already in favor of the views it presents. It is well known that many people evade points of view which are at odds with their own by the simple expedient of not exposing themselves to such views. Those who most need to be influenced by certain communications are least likely to be reached by them.¹

¹ P. F. Lazarsfeld, B. Berelson, and H. Gaudet, *The People's Choice* (New York: Duell, Sloan & Pearce, 1944); P. F. Lazarsfeld and R. K. Merton, "Studies

Thus the bulk of the listeners to educational radio programs are among the better-educated segment of the listening audience. A study of a radio program designed to promote friendship, cooperation, and mutual respect among various immigrant groups showed that a program about Italians was listened to chiefly by Italians, a program about Poles was listened to chiefly by Poles, and so on.² In the same way, anti-prejudice propaganda is likely to reach or affect a considerably smaller proportion of the prejudiced group in the population than of the nonprejudiced.

This is, of course, not a denial of the value of pro-democratic propaganda. The audience of such propaganda is composed of sympathizers, neutrals, and opponents. Although the opponents may be largely unaffected, the other two groups may still be influenced. Here, however, we are chiefly concerned with the reaction of the prejudiced person to anti-prejudice propaganda. What happens when in an experimental situation they are involuntarily confronted with it?

There are, theoretically, two possibilities: they may fight it, or they may give in to it. But our research in this field has shown us that many people are unwilling to do either: they prefer not to face the implications of ideas opposed to their own so that they do not have to be forced either to defend themselves or to admit error. What they do is to evade the issue psychologically by *simply not understanding the message*.

It is true that understanding of communications is related to the amount of education of the audience. However, even among people on the same educational level, those who are prejudiced are more apt to misunderstand a message than the unprejudiced.³

This article deals with two aspects of the problem of propaganda evasion: its mechanisms and its cultural basis. The first

in Radio and Film Propaganda," *Transactions of the New York Academy of Science* 6 (1943): 58-79.

² P. F. Lazarsfeld, ed., *Radio and the Printed Page* (New York: Duell, Sloan & Pearce, 1944).

³ There is evidence for this in a number of studies conducted by this department and by the Bureau of Applied Social Research of Columbia University.

part is drawn from evidence collected in about a dozen studies of the public's response to anti-prejudice propaganda; the second part is speculative and hypothetical. Considerably more research would be needed to verify our tentative ideas on the motivation of propaganda evasion.

The Mechanisms of Propaganda Evasion

The evidence for the techniques employed by a prejudiced respondent in order to avoid understanding is, of necessity, inferential. The process of evasion occurs in the respondent's mind some time between the presentation of a propaganda item and the respondent's "final" statement in answer to the interviewer's questions. The mechanisms involved in evasion, although they may be rather complicated and may appear to be deliberate, are in most cases probably unconscious. It is impossible to determine from even depth interview data at what level of consciousness the process occurs, that is, to what extent the respondent is aware of his evasion.

Evidence of the evasion process is often revealed in the course of the interview, if the interview is considered as an integrated whole and individual statements are not accepted in a disjointed, static fashion as isolated answers to isolated questions.

IDENTIFICATION AVOIDED—UNDERSTANDING "DERAILED"

An example of how a dynamic interpretation of the whole course of the interview reveals evidence of the process of evasion is provided by a recent study of a cartoon series. The cartoons lampoon a character dubbed Mr. Biggott.⁴ To bring home the satire of the cartoon, he is shown as a rather ridiculous prudish figure, with exaggerated anti-minority feelings.

What the producers of the cartoon intended was roughly

⁴ Several Mr. Biggott studies were done. The one from which the following examples are drawn was conducted for the Department of Scientific Research of the American Jewish Committee by the Bureau of Applied Social Research of Columbia University.

this. The prejudiced reader would perceive that Mr. Biggott's ideas about minorities were similar to his own; that Mr. Biggott was an absurd character; that it was absurd to have such ideas—that to have such ideas made one as ridiculous as Mr. Biggott. He would, then, as the final stage in this process, presumably reject his own prejudice, in order to avoid identification with Mr. Biggott.

The study showed a very different result. Prejudiced respondents who understood the cartoon initially—that is, they went through the first three stages mentioned above—went to such lengths to extricate themselves from their identification with Mr. Biggott that in the end they *misunderstood the point of the cartoon*. To use the phrase of the writers of this report, there was a "derailment of understanding."

Here is an example of one of the ways in which the cartoons were misunderstood.⁵ The respondent at first identified with Mr. Biggott, saying, among other things which indicated this identification, "I imagine he's a sour old bachelor—(laughing)—I'm an old bachelor myself." He also seemed to be aware of Mr. Biggott's prejudices. As the interview progressed, in order to differentiate himself from Mr. Biggott, he concentrated on proving that Mr. Biggott's social status was inferior, that he was a parvenu. This led to a loss of focus on the real problems presented by the cartoons.

Sixth generation American blood. He don't want anything but sixth generation American blood! Ha! That's pretty good.

At this point the man begins to focus on Mr. Biggott's social inferiority and his attention is deflected from the issue of prejudice more and more as the process continues:

Well, you know, *I'm eighth generation myself*, of English descent on both sides. My family settled up on Connecticut, C_____, Connecticut, in 1631. A sixth generation American—he's a man of six generations himself. *Maybe less than that. . . .* (What is the doctor thinking?) He's astonished,

⁵ In the particular cartoon discussed, Mr. Biggott is shown lying in a hospital bed with a doctor in attendance, and saying that for his blood transfusion he wants only "sixth generation American blood."

I guess. He thinks this man has an awful nerve. He looks like a crabby old man. *He may not be the best blood either.*

Mr. Biggott's prejudices have become snobbish pretensions and, as the interview continues, the respondent regards him more and more as a "lower class" symbol:

(Do you know anyone like him?) *No, I have no interest in knowing anyone like that. I've known some like him up in C._____.* This particular man was in the Congregational Church—*of course* that's the church to which my family belongs. . . . He made plenty of money as an undertaker too. You know, my father died a few years ago, The burial cost \$180. He knew that at the time I didn't have any money. He trusted me, let me pay it gradually. But, you know, he charged me 6 per cent interest. Yes, *that's what he charged me. Even though he knew my family and all that.* . . .

By this time the issue of prejudice has been completely sidetracked. Biggott reminds the respondent only of an old acquaintance whom he considers rather crude. At the end the cartoons become for him only a kind of test for judging personality characteristics:

(What do you think is the purpose of these cartoons?) To get the viewpoint of anyone. From the viewpoint you can form some opinion of that person. You can get different answers—some agree and some say something else. You can compare them and draw some conclusions. . . . (What is the artist trying to do?) To get the *viewpoint of people to see if they coincide with the artist's idea of character* and all. Some would, some would differ.

In the same study there were other variations in what might be called the path of the misunderstanding. Some people caricatured Mr. Biggott, made him a target of ridicule; others made him appear intellectually inferior; still others transformed him into a foreigner or a Jew. Regardless of the particular line developed, the process is essentially the same. Whether or not a respondent follows one of these lines rather than another is probably a matter of temperament and character.

Such complicated forms of arriving circuitously at misunder-

standing when there is good evidence that spontaneous understanding was present at first are, of course, not the only form of evasion that the prejudiced person takes to escape facing the criticism implied in the message of a propaganda item; but they are the most revealing forms as to the influence of prejudice on comprehension. The conflict about having prejudices must be strong, and at the same time the prejudice must be deeply rooted in the character structure. Under the pressure of this psychological predisposition the respondent takes the roundabout way of first understanding the content of the propaganda item; then identifying with the prejudiced figure, perceiving the criticism of his own position involved in the item; inventing means of disidentification from the special instance of prejudice depicted by the propaganda item; and in the process losing the original understanding of the message. Apparently this process occurs frequently; the unconscious ingenuity of the respondent sets in mainly during the last two steps.

THE MESSAGE MADE INVALID

In other cases the process of disidentification leads to more rationalized argumentation. Understanding has been admitted too openly to permit distortion of the message. The respondent accepts the message on the surface but makes it invalid for himself in one of two ways. He may admit the general principle, but claim that in exceptions one is entitled to one's prejudices; or he may admit that the individual item is convincing in itself, but that it is not a correct picture of usual life situations involving the minority group discussed. There is evidence in our studies of both types.

The first type of distortion occurred as a common reaction to a pro-tolerance propaganda booklet. This was presented in the form of a series of well-drawn comic cartoons exposing the absurdity of generalizations about various groups. It concluded with the Golden Rule, "Live and let live." Prejudiced persons frequently followed the whole story with interest and amusement to the end, accepting the Golden Rule, but added: "But

it's the Jews that don't let you live; they put themselves outside the rule."

Perhaps even more frequent is the tendency to accept the isolated story presented in propaganda as "just a story." The need to maintain the attention value of a propaganda item through a human-interest appeal has led many propagandists to exemplify by one outstanding dramatic story the general principle for which they wish to enlist support. This technique was used in a broadcast dramatization, "The Belgian Village," presented on the CBS series, "We, the People." In the story, a Jewish couple in an occupied Belgian village are saved by the loyal support of the villagers who hide them from the Gestapo. The dramatization was followed by a direct appeal, spoken by Kate Smith, for sympathy and tolerance toward the Jews. Considerably more of the apparently prejudiced respondents⁶ than of the others in the test audience refused to admit the applicability of this dramatic story to other situations. They called it an "adventure story," a "war story," and they discussed the dramatic highlights with great interest but treated the explicit appeal attached to the incident either as if it had not occurred or as an unjustified artificial addition.

CHANGING THE FRAME OF REFERENCE

There remain to be discussed two other forms of misunderstanding by prejudiced persons. One of them is of greater interest than the other: in these cases the prejudiced person's perception is so colored by his prejudice that issues presented in a frame of reference different from his own are transformed so as to become compatible with his own views. Quite unaware of the violation of facts he commits, he imposes on a propaganda item his own frame of reference. This type of response was found in a study of a cartoon depicting a congressman who has native fascist, anti-minority views. The cartoon series seeks to expose and ridicule him so as to focus the readers' attention

⁶ They were rated "conservative" on political attitude questions which have a fairly high correlation with a negative attitude toward minorities.

upon such native anti-democratic movements and to cause them to disapprove of these tendencies. For example, in one cartoon, the congressman is shown interviewing an applicant in his office. The man has brought a letter of recommendation saying that he has been in jail, has started race riots, has smashed windows. The congressman is pleased and says, "Of course I can use you in my new party."

One respondent commented: "It might be anything crooked . . . might be a new labor party. That shady character makes me think so, the one applying for a job."

Another, in response to the second picture in the series said: ". . . a bunch of men down in Congress that are more interested in keeping their jobs, interested in the votes rather than anything else . . . I never liked Senator Wagner. . . ."

Another: "It's about a strike . . . about trouble like strikes . . . He is starting a Communist party."

The type becomes clearest in the following reply: "It's a Jewish party that would help Jews get more power."

The only clue that these respondents took from the cartoon was the fact that it tried to show up a bad politician. The rest they supplied themselves by identifying the congressman with whatever appeared to them to be "bad politics." Thus they imposed their own ideology on the cartoon and arrived at an interpretation satisfactory to them—an interpretation which, however, represented a complete misunderstanding of the cartoon's message.

THE MESSAGE IS TOO DIFFICULT

The remaining type of misunderstanding can be dismissed quickly. This takes the same form as misunderstanding by unprejudiced people. Some respondents frankly admit that "they don't get the point." This is most frequently due to intellectual and educational limitations of these respondents or to defects in the propaganda.

These evasion processes have obvious implications for the producers of cartoons (and probably of propaganda in general). Given the tendency to evade opposition propaganda, evasion is

facilitated by making the message subtle or satirical. However, simplifying the message may lessen its emotional impact. What seems to be indicated is that the more subtle—and therefore the more easily distorted and misunderstood—forms may be appropriate for neutrals and for inactive sympathizers of the anti-prejudice message: these people do not show evidence of this tendency to *evoke* the message although they may misunderstand for other reasons, and the impact of the item may make stronger supporters of them. For the prejudiced person the research suggests that this approach is ineffective.

For a better understanding of the evasion mechanism we must turn to an examination of the motivation underlying it and its role in our culture.

Evasion—A Cultural Pattern

A thorough examination of the motivation underlying evasion would require a much more extensive treatment than we can provide here. However, certain cultural features may be mentioned which seem to bear out in other areas the kind of evasion mechanism discussed above.

FEAR OF ISOLATION AND THE THREAT TO THE EGO

The fear of isolation is a major force in our society, where the majority of people are dependent upon group membership not only for their physical well-being but also for psychological support. They rely upon group codes and group values as guides for their behavior and their ideals. Nearly everyone wants to “belong.” At the same time this is complicated by the fact that assembly-line production and the general complexity of modern life tend to drive people into more and more atomistic contacts with their fellow men, thereby increasing the fear of losing identity with the group.

From a psychological point of view, the evasion of a propaganda message with which one disagrees functions as a defense mechanism. Such defense mechanisms come into play whenever an individual senses a danger to his ego structure—that is,

whenever his self-confidence hangs in the balance. As we have seen, the steps involved in the evasion process are fairly complicated. However, these complications are obviously negligible compared to the discomfort that would be created by facing the message.

The printed propaganda items that attack prejudice are an attack on the ego of the prejudiced person. Moreover, they constitute an attack made with the authority of the printed word, thus presumably speaking for a large part of the world that disapproves of the respondent. He is confronted with a two-fold threat to his security: on the one hand, he is an outsider in the world represented by the propaganda item; on the other hand, giving careful consideration to the validity of the propaganda and possibly accepting it threatens the individual's security in the group to which he feels he belongs and which supports his present ideas. The interviewing situation increases the threat to the security of the individual who feels attacked by anti-discrimination propaganda. Interviewers are trained to use an engaging, polite, and friendly manner when approaching a respondent; they are selected, not only for the skill they have acquired, but also for neatness and pleasantness of appearance in order to facilitate their contact with strangers. The respondent, who is on the defensive, probably links the person of the interviewer with that outside world which may disapprove of him. The interviewer's reluctance to voice his own opinion creates the suspicion that he, too, might disapprove of the respondent's attitude.

The emotional nature of prejudice has been well enough established to explain why the prejudiced respondent often does not trust his own capacity for logical argument on the subject. He feels himself attacked in spheres that actually transcend logic. So where possible, he evades the issue. Although there is insufficient evidence on this point, we venture the guess that the less a person has rationalized his prejudices, the greater will be his tendency to evade an attack on them. Those who are most advanced in the rationalization of prejudice will not feel the need for evasion to the same degree as their less ideologically developed supporters. Witness the pseudo-science on race

questions developed by the Nazis and their followers in this country. Those, however, who are infected without having made the decisive step over to the "lunatic fringe," and who are only dimly aware of the irrational basis of their particular attitude, will try to weasel out of their difficulty when confronted with the disconcerting anti-discrimination message.

THE MULTIPLICITY OF VALUE SYSTEMS

Another dimension must be added to the phenomenon of propaganda evasion before it can be understood. This dimension is closely related to that part of our life experience which involves inconsistencies or contradictions. There exists in our society a culturally conditioned habit of evasion, a product of the fact that each individual is compelled to participate in many different groups, each of which has its own more or less well defined value systems. Often, these value systems are somewhat inconsistent with each other; sometimes they imply a different hierarchy of values.

Examples of simultaneous acceptance of inconsistent value systems abound. The obsequious bookkeeper who assumes a dominant role in political discussions with his barbershop cronies is a familiar figure in the modern literature of the western world. We are not surprised when a store-owner who privately champions progressive causes refuses to hire a Negro salesclerk on the grounds that his customers will object. The example of the bookkeeper illustrates the necessity for flexibly shifting from one social role to another. The storekeeper, too, is involved in a conflict between his public and private attitudes. He keeps the solution of this conflict in abeyance by setting up a special hierarchy of values for his business role: he knows that he is supported by the generally accepted view that taking care of one's profits takes precedence over other considerations.

Thus two possible alternatives are available. These contradictions may either be recognized and resolved, or they may be evaded. Instead of looking squarely at the inconsistencies, one may divide one's life into so many little pockets in which be-

havior is determined by independent and even contradictory values; or one may realistically examine and compare the values involved in his various day-to-day roles and then weigh their relative merits as behavior guides.

Evidence of this was found in a study of the impact of factory life on children who had just left school.⁷ The moral values they had been taught in school were confronted in the factory with an inflation of the importance of efficiency to the exclusion of morality. Nevertheless, the absorption of this new value system was achieved with incredible speed. But the two systems were not reconciled, nor was one abandoned for the other. They coexisted in strictly separate compartments of the personality; the issue of conflict was evaded by the departmentalizing of the personality.

OTHER CULTURAL FACTORS IN EVASION

In this context the lack of spontaneity so characteristic of people living in our culture must be considered.⁸ The public which comprises the audience for the mass media of communications is entertainment-hungry. Many of them are lulled into boredom and fatigue by their jobs; outside their jobs, they want to have fun. They want to be entertained without having to think. And they are encouraged to persist in this mental laziness by the stereotypy of these communications. Not only are they continually confronted with entertainment cast in the same mold; they are even told how to react to it. Everything is, as it were, pre-digested for them. They are informed by advertisements that a comedy will make them "laugh 'til their sides ache," that a sentimental love story will "wring their hearts," to mention only the most superficial appeals. As one writer has put it, "they march to their destiny by catch-words." Ideas are adopted, not as ideas, but as slogans. Where ideas infiltrate in

⁷ M. Jahoda, "Some Socio-Psychological Problems of Factory Life," *British Journal of Psychology* 31 (1941): 191-206.

⁸ T. W. Adorno, "On Popular Music," *Studies in Philosophy and Social Science* 9 (1941): 17-48; M. Horkheimer, "Art and Mass Culture," *ibid.*, pp. 293-304; M. Horkheimer, "The End of Reason," *ibid.*, pp. 366-88; L. Lowenthal, "Biographies in Popular Magazines," in *Radio Research, 1942-43* (New York: Duell, Sloan & Pearce, 1944), pp. 507-48.

the guise of entertainment, the habitual shying away from effort comes to the rescue of the person who is the propaganda target and helps him to miss the point of the message. The only alternative would be to face the implications of the message and think about them, and this they neither want nor are habituated to do.

Also involved but probably less important in the complex of propaganda evasion is the factor of recognition value. Audiences tend to prefer the things which are familiar to them. The best-liked music is the music one knows. What is new is a little suspect, requires more effort in listening, and has no preestablished associations which prescribe a pattern of response. Hence it is rejected.⁹ It is quite likely that a similar tendency makes itself felt in the consideration of new (and oppositional) ideas.

WHY EVASION?

Why has evasion become so general? The answer lies partly in the difficulties the individual must face to achieve uniformity in the various areas of his everyday experience. To face the contradictions and try to resolve them would undoubtedly set up disturbing tensions which would in turn involve serious difficulties for most individuals. For example, consider the fact that most people agree with the ideas of their own social group; they are conditioned by the people with whom they live and, in turn, they choose to be with people whose attitudes are compatible with their own. Adopting a conflicting attitude would create antagonisms in interpersonal relationships, requiring considerable adjustment on the part of the individual. Even *considering* an opposing point of view may create great discomfort.

Thus evasion appears as a well-practiced form of behavior which receives encouragement from the social structure in which we live. In connection with response to anti-prejudice propaganda, it serves as a defense against group attack. This may partly explain why persons with poorly developed ego structures tend most frequently to take this easy way out.

⁹ Adorno, "On Popular Music."

ALBERT H. HASTORF AND
HADLEY CANTRIL

*They Saw a Game:
A Case Study*

The constantly recurring question in studies of the perception of events is a philosophical as well as psychological one: What is reality? Here is another study of conflicting perceptions of the same objective stimulus. In this case, it was a football game between Dartmouth and Princeton. It was an important game. Feelings were high. A considerable amount of rough play took place on the field. Some star players were injured. Discussion and argument went on long after the Saturday when the game was played. Hastorf and Cantril (one of whom was then at Dartmouth, one at Princeton) had the good sense to take advantage of the situation to see how the game was perceived by students from the two institutions. As their article demonstrates, it was two games—one the game seen by Princeton, the other as seen by Dartmouth. Even when shown a film of the game a considerable time after the actual event, students from the two colleges still perceived different things happening on the turf at Palmer Stadium. "It seems clear," the two psychologists wrote, that "there is no such a thing as a 'game' existing 'out there' in its own right which people 'observe.' The 'game' exists for a person and is experienced by him only insofar as certain happenings have significance in terms of his purpose." This article appeared originally in the *Journal of Abnormal and Social Psychology* 49 (1954):129-34, and was copyrighted in that year by the journal. It is reprinted by permission of authors and copyright holder. Dr. Hastorf is now dean of humanities and sciences at Stanford. Dr. Cantril, who died recently, was once chairman of the psychology department at Princeton and board chairman of the Institute for International Social Research.

ON A BRISK SATURDAY AFTERNOON, November 23, 1951, the Dartmouth football team played Princeton in Princeton's Palmer Stadium. It was the last game of the season for both teams and of rather special significance because the Princeton team had won all its games so far and one of its players, Kazmaier, was receiving All-American mention and had just appeared as

the cover man on *Time* magazine, and was playing his last game.

A few minutes after the opening kickoff, it became apparent that the game was going to be a rough one. The referees were kept busy blowing their whistles and penalizing both sides. In the second quarter, Princeton's star left the game with a broken nose. In the third quarter, a Dartmouth player was taken off the field with a broken leg. Tempers flared both during and after the game. The official statistics of the game, which Princeton won, showed that Dartmouth was penalized seventy yards and Princeton twenty-five, not counting more than a few plays in which both sides were penalized.

Needless to say, accusations soon began to fly. The game immediately became a matter of concern to players, students, coaches, and the administrative officials of the two institutions, as well as to alumni and the general public who had not seen the game but had become sensitive to the problem of big-time football through the recent exposures of subsidized players, commercialism, etc. Discussion of the game continued for several weeks.

One of the contributing factors to the extended discussion of the game was the extensive space given to it by both campus and metropolitan newspapers. An indication of the fervor with which the discussions were carried on is shown by a few excerpts from the campus dailies.

For example, on November 27 (four days after the game), the *Daily Princetonian* (Princeton's student newspaper) said:

This observer has never seen quite such a disgusting exhibition of so-called "sport." Both teams were guilty but the blame must be laid primarily on Dartmouth's doorstep. Princeton, obviously the better team, had no reason to rough up Dartmouth. Looking at the situation rationally, we don't see why the Indians should make a deliberate attempt to cripple Dick Kazmaier or any other Princeton player. The Dartmouth psychology, however, is not rational itself.

The November 30 edition of the *Princeton Alumni Weekly* said:

But certain memories of what occurred will not be easily erased. Into the record books will go in indelible fashion the fact that the last game of Dick Kazmaier's career was cut short by more than half when he was forced out with a broken nose and a mild concussion, sustained from a tackle that came well after he had thrown a pass.

This second-period development was followed by a third quarter outbreak of roughness that was climaxed when a Dartmouth player deliberately kicked Brad Glass in the ribs while the latter was on his back. Throughout the often unpleasant afternoon, there was undeniable evidence that the losers' tactics were the result of an actual style of play, and reports on other games they have played this season substantiate this.

Dartmouth students were "seeing" an entirely different version of the game through the editorial eyes of the *Dartmouth* (Dartmouth's undergraduate newspaper). For example, on November 27 the *Dartmouth* said:

However, the Dartmouth-Princeton game set the stage for the other type of dirty football. A type which may be termed as an unjustifiable accusation.

Dick Kazmaier was injured early in the game. Kazmaier was the star, an All-American. Other stars have been injured before, but Kazmaier had been built to represent a Princeton idol. When an idol is hurt there is only one recourse—the tag of dirty football. So what did the Tiger Coach Charley Caldwell do? He announced to the world that the Big Green had been out to extinguish the Princeton star. His purpose was achieved.

After this incident, Caldwell instilled the old see-what-they-did-go-get-them attitude into his players. His talk got results. Gene Howard and Jim Miller were both injured. Both had dropped back to pass, had passed, and were standing unprotected in the backfield. Result: one bad leg and one leg broken.

The game was rough and did get a bit out of hand in the third quarter. Yet most of the roughing penalties were called against Princeton while Dartmouth received more of the illegal-use-of-the-hands variety.

On November 28 the *Dartmouth* said:

Dick Kazmaier of Princeton admittedly is an unusually able football player. Many Dartmouth men traveled to Princeton,

not expecting to win—only hoping to see an All-American in action. Dick Kazmaier was hurt in the second period, and played only a token part in the remainder of the game. For this, spectators were sorry.

But there were no such feelings for Dick Kazmaier's health. Medical authorities have confirmed that as a relatively unprotected passing and running star in a contact sport, he is quite liable to injury. Also, his particular injuries—a broken nose and slight concussion—were no more serious than is experienced almost any day in any football practice, where there is no more serious stake than playing the following Saturday. Up to the Princeton game, Dartmouth players suffered about ten known nose fractures and face injuries, not to mention several slight concussions.

Did Princeton players feel so badly about losing their star? They shouldn't have. During the past undefeated campaign they stopped several individual stars by a concentrated effort, including such mainstays as Frank Hauff of Navy, Glenn Adams of Pennsylvania and Rocco Calvo of Cornell.

In other words, the same brand of football condemned by the *Prince*—that of stopping the big man—is practiced quite successfully by the Tigers.

Basically, then, there was disagreement as to what had happened during the "game." Hence we took the opportunity presented by the occasion to make a "real life" study of a perceptual problem.¹

Procedure

Two steps were involved in gathering data. The first consisted of answers to a questionnaire designed to get reactions to the game and to learn something of the climate of opinion in each institution. This questionnaire was administered a week after the game to both Dartmouth and Princeton undergraduates who were taking introductory and intermediate psychology courses.

The second step consisted of showing the same motion pic-

¹ We are not concerned here with the problem of guilt or responsibility for infractions, and nothing here implies any judgment as to who was to blame.

ture of the game to a sample of undergraduates in each school and having them check on another questionnaire, as they watched the film, any infraction of the rules they saw and whether these infractions were "mild" or "flagrant."² At Dartmouth, members of two fraternities were asked to view the film on December 7; at Princeton, members of two undergraduate clubs saw the film early in January.

The answers to both questionnaires were carefully coded and transferred to punch cards.³

Results

Table 1 shows the questions which received different replies from the two student populations on the first questionnaire.

Questions asking if the students had friends on the team, if they had ever played football themselves, if they felt they knew the rules of the game well, etc., showed no differences in either school and no relation to answers given to other questions. This is not surprising since the students in both schools come from essentially the same type of educational, economic, and ethnic background.

Summarizing the data of Tables 1 and 2, we find a marked contrast between the two student groups.

Nearly all *Princeton* students judged the game as "rough and dirty"—not one of them thought it "clean and fair." And almost nine-tenths of them thought the other side started the rough play. By and large they felt that the charges they understood were being made were true; most of them felt the charges were made in order to avoid similar situations in the future.

When Princeton students looked at the movie of the game, they saw the Dartmouth team make over twice as many infractions as their own team made. And they saw the Dartmouth

² The film shown was kindly loaned for the purpose of the experiment by the Dartmouth College Athletic Council. It should be pointed out that a movie of a football game follows the ball, is thus selective, and omits a good deal of the total action on the field. Also, of course, in viewing only a film of a game, the possibilities of participation as spectator are greatly limited.

³ We gratefully acknowledge the assistance of Virginia Zerega, Office of Public Opinion Research; J. L. McCandless, Princeton University; and E. S. Horton, Dartmouth College, in the gathering and collation of the data.

team make over twice as many infractions as were seen by Dartmouth students. When Princeton students judged these infractions as "flagrant" or "mild," the ratio was about two "flagrant" to one "mild" on the Dartmouth team, and about one "flagrant" to three "mild" on the Princeton team.

As for the *Dartmouth* students, while the plurality of answers fell in the "rough and dirty" category, over one-tenth thought the game was "clean and fair" and over a third introduced their own category of "rough and fair" to describe the action. Although a third of the Dartmouth students felt that Dartmouth was to blame for starting the rough play, the majority of Dartmouth students thought both sides were to blame. By and large, Dartmouth men felt that the charges they understood were being made were not true, and most of them thought the reason for the charges was Princeton's concern for its football star.

When Dartmouth students looked at the movie of the game they saw both teams make about the same number of infractions. And they saw their own team make only half the number of infractions the Princeton students saw them make. The ratio of "flagrant" to "mild" infractions was about one to one when Dartmouth students judged the Dartmouth team, and about one "flagrant" to two "mild" when Dartmouth students judged infractions made by the Princeton team.

It should be noted that Dartmouth and Princeton students were thinking of different charges in judging their validity and in assigning reasons as to why the charges were made. It should also be noted that whether or not students were spectators of the game in the stadium made little difference in their responses.

*Interpretation: The Nature of a
Social Event*⁴

It seems clear that the "game" actually was many different games and that each version of the events that transpired was

⁴The interpretation of the nature of a social event sketched here is in part based on discussions with Adelbert Ames, Jr., and is being elaborated in more detail elsewhere.

TABLE 1. DATA FROM FIRST QUESTIONNAIRE

QUESTION	DARTMOUTH STUDENTS (<i>N</i> = 163) %	PRINCETON STUDENTS (<i>N</i> = 161) %
1. Did you happen to see the actual game between Dartmouth and Princeton in Palmer Stadium this year?		
Yes	33	71
No	67	29
2. Have you seen a movie of the game or seen it on television?		
Yes, movie	33	2
Yes, television	0	1
No, neither	67	97
3. (Asked of those who answered "yes" to either or both of above questions.) From your observations of what went on at the game, do you believe the game was clean and fairly played, or that it was unnecessarily rough and dirty?		
Clean and fair	6	0
Rough and dirty	24	69
Rough and fair*	25	2
No answer	45	29
4. (Asked of those who answered "no" on both of the first questions.) From what you have heard and read about the game, do you feel it was clean and fairly played, or that it was unnecessarily rough and dirty?		
Clean and fair	7	0
Rough and dirty	18	24
Rough and fair*	14	1
Don't know	6	4
No answer	55	71

QUESTION	DARTMOUTH STUDENTS (<i>N</i> = 163) %	PRINCETON STUDENTS (<i>N</i> = 161) %
(Combined answers to questions 3 and 4 above)		
Clean and fair	13	0
Rough and dirty	42	93
Rough and fair*	39	3
Don't know	6	4
5. From what you saw in the game or the movies, or from what you have read, which team do you feel started the rough play?		
Dartmouth started it	36	86
Princeton started it	2	0
Both started it	53	11
Neither	6	1
No answer	3	2
6. What is your understanding of the charges being made?*		
Dartmouth tried to get Kazmaier	71	47
Dartmouth intentionally dirty	52	44
Dartmouth unnecessarily rough	8	35
7. Do you feel there is any truth to these charges?		
Yes	10	55
No	57	4
Partly	29	35
Don't know	4	6
8. Why do you think the charges were made?		
Injury to Princeton star	70	23
To prevent repetition	2	46
No answer	28	31

* This answer was not included on the checklist but was written in by the percentage of students indicated.

** Replies do not add to 100% since more than one charge could be given.

TABLE 2. DATA FROM SECOND QUESTIONNAIRE CHECKED WHILE SEEING FILM

GROUP	N	TOTAL NUMBER OF INFRACTIONS CHECKED AGAINST			
		DARTMOUTH TEAM		PRINCETON TEAM	
		MEAN	SD	MEAN	SD
Dartmouth students	48	4.3*	2.7	4.4	2.8
Princeton students	49	9.8*	5.7	4.2	3.5

* Significant at the .01 level.

just as "real" to a particular person as other versions were to other people. A consideration of the experiential phenomena that constitute a "football game" for the spectator may help us both to account for the results obtained and illustrate something of the nature of any social event.

Like any other complex social occurrence, a "football game" consists of a whole host of happenings. Many different events are occurring simultaneously. Furthermore, each happening is a link in a chain of happenings, so that one follows another in sequence. The "football game," as well as other complex social situations, consists of a whole matrix of events. In the game situation, this matrix of events consists of the actions of all the players, together with the behavior of the referees and linesmen, the action on the sidelines, in the grandstands, over the loudspeaker, etc.

Of crucial importance is the fact that an "occurrence" on the football field or in any other social situation does not become an experiential "event" unless and until some significance is given to it: an "occurrence" becomes an "event" only when the happening has significance. And a happening generally has significance only if it reactivates learned significances already registered in what we have called a person's assumptive form-world.⁵

Hence the particular occurrences that different people expe-

⁵ H. Cantril, *The "Why" of Man's Experience* (New York: Macmillan, 1950).

rienced in the football game were a limited series of events from the total matrix of events *potentially* available to them. People experienced those occurrences that reactivated significances they brought to the occasion; they failed to experience those occurrences which did not reactivate past significances. We do not need to introduce "attention" as an "intervening third" (to paraphrase James on memory) to account for the selectivity of the experiential process.

In this particular study, one of the most interesting examples of this phenomenon was a telegram sent to an officer of Dartmouth College by a member of a Dartmouth alumni group in the Midwest. He had viewed the film which had been shipped to his alumni group from Princeton after its use with Princeton students, who saw, as we noted, an average of over nine infractions by Dartmouth players during the game. The alumnus, who couldn't see the infractions he had heard publicized, wired: "Preview of Princeton movies indicates considerable cutting of important part please wire explanation and possibly air mail missing part before showing scheduled for January 25 we have splicing equipment."

The "same" sensory impingements emanating from the football field, transmitted through the visual mechanism to the brain, also obviously gave rise to different experiences in different people. The significances assumed by different happenings for different people depend in large part on the purposes people bring to the occasion and the assumptions they have of the purposes and probable behavior of other people involved. This was amusingly pointed out by the *New York Herald Tribune's* sports columnist, Red Smith, in describing a prize fight between Chico Vejar and Carmine Fiore in his column of December 21, 1951. Among other things, he wrote:

"You see, Steve Ellis is the proprietor of Chico Vejar, who is a highly desirable tract of Stamford, Conn., welterweight. Steve is also a radio announcer. Ordinarily there is no conflict between Ellis the Brain and Ellis the Voice because Steve is an uncommonly substantial lump of meat who can support both halves of a split personality and give away weight on each end without missing it.

This time, though, the two Ellises met head-on, with a sickening, rending crash. Steve the Manager sat at ringside in the guise of Steve the Announcer broadcasting a dispassionate, unbiased, objective report of Chico's adventures in the ring. . . .

Clear as mountain water, his words came through, winning big for Chico. Winning? Hell, Steve was slaughtering poor Fiore.

Watching and listening, you could see what a valiant effort the reporter was making to remain cool and detached. At the same time you had an illustration of the old, established truth that when anybody with a preference watches a fight, he sees only what he prefers to see.

That is always so. That is why, after any fight that doesn't end in a clean knockout, there always are at least a few hoots when the decision is announced. A guy from, say, Billy Graham's neighborhood goes to see Billy fight and he watches Graham all the time. He sees all the punches Billy throws, and hardly any of the punches Billy catches. So it was with Steve.

"Fiore feints with a left," he would say, honestly believing that Fiore hadn't caught Chico full on the chops. "Fiore's knees buckle," he said, "and Chico backs away." Steve didn't see the hook that had driven Chico back. . . .

In brief, the data here indicate that there is no such thing as a "game" existing "out there" in its own right which people merely "observe." The "game" exists for a person and is experienced by him only insofar as certain happenings have significances in terms of his purpose. Out of all the occurrences going on in the environment, a person selects those that have some significance for him from his own egocentric position in the total matrix.

Obviously in the case of a football game, the value of the experience of watching the game is enhanced if the purpose of "your" team is accomplished, that is, if the happening of the desired consequence is experienced—i.e., if your team wins. But the value attribute of the experience can, of course, be spoiled if the desire to win crowds out behavior we value and have come to call sportsmanlike.

The sharing of significances provides the links except for

which a "social" event would not be experienced and would not exist for anyone.

A "football game" would be impossible except for the rules of the game which we bring to the situation and which enable us to share with others the significances of various happenings. These rules make possible a certain repeatability of events such as first downs, touchdowns, etc. If a person is unfamiliar with the rules of the game, the behavior he sees lacks repeatability and consistent significance and hence "doesn't make sense."

And only because there is the possibility of repetition is there the possibility that a happening has a significance. For example, the balls used in games are designed to give a high degree of repeatability. While a football is about the only ball used in games which is not a sphere, the shape of the modern football has apparently evolved in order to achieve a higher degree of accuracy and speed in forward passing than would be obtained with a spherical ball, thus increasing the repeatability of an important phase of the game.

The rules of a football game, like laws, rituals, customs, and mores, are registered and preserved forms of sequential significances enabling people to share the significances of occurrences. The sharing of sequential significances which have value for us provides the links that operationally make social events possible. They are analogous to the forces of attraction that hold parts of an atom together, keeping each part from following its individual, independent course.

From this point of view it is inaccurate and misleading to say that different people have different attitudes concerning the same thing. For the thing simply is *not* the same for different people, whether the thing is a football game, a presidential candidate, communism, or spinach. We do not simply react to a happening or to some impingement from the environment in a determined way (except in behavior that has become reflexive or habitual). We behave according to what we bring to the occasion, and what each of us brings to the occasion is more or less unique. And except for these significances which we bring to the occasion, the happenings around us would be meaningless occurrences, would be inconsequential.

From the transactional view, an attitude is not a predisposition to react in a certain way to an occurrence or stimulus "out there" that exists in its own right with certain fixed characteristics which we color according to our predisposition.⁶ That is, a subject does not simply "react to" an "object." An attitude would rather seem to be a complex of registered significances reactivated by some stimulus which assumes its own particular significance for us in terms of our purposes. That is, the object as experienced would not exist for us except for the reactivated aspects of the form-world which provide particular significance to the hieroglyphics of sensory impingements.

⁶F. P. Kilpatrick, ed., *Human Behavior from the Transactional Point of View* (Hanover, N.H.: Institute for Associated Research, 1952).

PERCY H. TANNENBAUM

The Indexing Process in Communication

Audiences have available to them vastly more information than they can possibly process. How do they handle it? Of course, they never become aware of much of it, and they deliberately ignore large quantities the existence of which they are aware. In order to scan the parts of the communication environment that do come to their attention, they look for cues that tell them of the presence of something worth attending to more carefully. This works almost like an indexing process, and the mass media themselves contribute indexing devices that help a reader, listener, or viewer decide swiftly where he wants to concentrate his attention. Tannenbaum here analyzes this "indexing" process and gives a number of examples of it. His article was originally published in the *Public Opinion Quarterly*, and copyrighted by that journal, in 1955. It is reprinted by permission of the copyright holder and of the author, who is now a professor of psychology in the school of public administration at the University of California, Berkeley.

FROM A BROAD VIEWPOINT, we may conceive of two major classifications of variables that are operative in a given communication message having some effect, intended or otherwise. There are, on the one hand, factors in the recipients of the message which may enhance or limit its effectiveness. A variety of such audience variables has been studied,¹ but we still lack adequate measures to explore many of the presumably critical factors.

The other major classification consists of factors in the message itself. Obviously the content of a message will determine, to an extent, its effects. But what is the effective content? One obvious answer is to regard the *total* message as the single gross stimulus input into a communication situation, and to attribute any measurable effect of the communication to that single entity, as such. This has been the approach that has characterized most of the hundreds of studies that have demonstrated communication effects of one kind or another. There has been

¹ C. I. Hovland, I. L. Janis, and H. H. Kelley, *Communication and Persuasion* (New Haven: Yale University Press, 1953).

little attention to the distinctive components of this stimulus pattern.

Some investigations of content analysis² represent a certain degree of refinement from this gross approach. Here the focus is usually on the determination of the relative frequencies of arbitrarily established content categories, or in the isolation of basic themes or appeals. But in most studies of this kind, the causal relationship between content categories and effects is more often assumed than demonstrated.

The notion of an indexing process in communication effects is an outgrowth of regarding the communication message as a set of distinctive stimulus elements—of individual signs or cues usually (e.g., language), but not necessarily (e.g., pictorial communication), arranged in a sequential order of some kind. The nature of the basic message unit—is it the morpheme, the word, the phrase, the sentence, etc.?—remains undecided at present and is the undefined term of the system. This issue, however, is a vital one in communication theory and will ultimately have to be resolved. For our purposes here it is sufficient to make the assumption of the message being a *set* (in mathematical set theory terminology) of such undefined elements.

An *index* is considered to be a single such stimulus element or a stimulus complex that may serve to predispose a particular interpretation or meaning of the total stimulus pattern or of some segment of this stimulus pattern other than itself.³ Or, continuing the set theory analogy further, an index is a subset of the total message set; more precisely, it is a *proper subset*, in that it may be composed of one or more of the elements, but is never all of them. In a given communication message, then, there may be one or more such subsets which may or may not overlap (or intersect) one another, depending on the conditions of membership imposed.

One way in which an index may influence the effects of a

² B. Berelson, *Content Analysis in Communication Research* (Glencoe, Ill.: The Free Press, 1952).

³ A more precise definition of an index is given in the "Discussion" section of this paper.

communication is, of course, in terms of *attracting attention* to that message. If a particular cue or cue combination within the total message structure somehow raises the threshold of attention for that message and guides its selection over other messages, then it has served to influence its potentiality for effect. This is particularly true of the *mass* communication situation. Schramm has referred to this aspect of the indexing process as follows: "Communications is a buyer's market. Far more stimuli come to us than we are able to attend to. . . . There is good reason to think that we scan our communication environment like an index, selecting among cues and concentrating our attention on the signs associated with the cues that specially attract us. . . . For example, we habitually listen to a newscast at a relatively low level of attention until a cue word or phrase awakens our attention and invites us to respond to a group of signs associated with the cue."⁴

This illustration stems directly from one of Schramm's own studies.⁵ He found that the presence of the name of a well-known person—in this case, a popular campus athlete—in association with a particular radio newscast item significantly enhanced the recall of that item. Moreover, some sort of generalization effect seemed to exist: items closely adjacent to the name-linked one were recalled significantly more frequently than when the name cue was absent.

Another way in which an index may function is in influencing the *decoding* of the message. An incoming stimulus pattern impinges on and interacts with the predisposing, subjective factors within the recipient of the communication. The result of such integration of the message complex within the subjective frame of reference of the individual is the precipitation of the meaning of that message for that person.⁶ This internal activity also serves to mediate any responses the individual may make to the message in that it provides the distinctive self-stimula-

⁴ W. Schramm, *Personal communication*.

⁵ Related to the writer by Wilbur Schramm, and reported herein with his permission.

⁶ For a more thorough treatment of this identification of "meaning" with perception, see C. E. Osgood, *Method and Theory in Experimental Psychology* (New York: Oxford University Press, 1953), pp. 194-95.

tion for such responses. If a particular message segment influences this central perceptual process in some way, it has then served as an index.

In the nomenclature of perception, the focus of inquiry here is whether the part can influence the perception of the whole, or, in some cases, whether it can influence the perception of another of the parts. As a problem in perception, this is not novel. The literature of traditional perception abounds with examples of this,⁷ as does that of the more contemporary "new look" perception.⁸

Verbal Indexes

There is considerable evidence for the influence of verbal indexes on perception. Asch found that the simple substitution of the word "cold" for "warm" in a list of eight descriptive adjectives significantly altered the impression of the personality these adjectives were supposed to describe.⁹ And there is further evidence for the operation of the warm-cold variable as an index.¹⁰ Several experiments have shown that the verbal applied to an ambiguous design in many cases determined the nature of the reproduction of that design.¹¹ Following another

⁷ See, e.g., E. G. Boring, *Sensation and Perception in the History of Experimental Psychology* (New York: Appleton-Century, 1942), and M. D. Vernon, *A Further Study of Visual Perception* (Cambridge: Cambridge University Press, 1952).

⁸ See J. S. Bruner, "Personality Dynamics and the Process and Perceiving," in R. R. Blake and G. V. Ramsey eds., *Perception: An Approach to Personality* (New York: Ronald Press, 1951).

⁹ S. E. Asch, "Forming Impressions of Personality," *Journal of Abnormal and Social Psychology* 41 (1946): 258-90.

¹⁰ H. H. Kelley, "The Warm-Cold Variable in First Impressions of Persons," *Journal of Personality* 18 (1950): 431-39; I. M. Mersh and J. Wishner, "Asch on 'Forming Impressions of Personality': Further Evidence," *Journal of Personality* 16 (1947): 188-91; and C. N. Cofer and J. T. Dunn, "Personality Ratings as Influenced by Verbal Stimuli," *Journal of Personality* 21 (1952): 223-27.

¹¹ L. Carmichael, H. P. Hogan, and A. A. Walter, "An Experimental Study of the Effect of Language on the Reproduction of Visually Perceived Forms," *Journal of Experimental Psychology* 15 (1932): 73-86; J. J. Gibson, "The Reproduction of Visually Perceived Forms," *Journal of Experimental Psychology* 12 (1929): 1-39; and A. S. Luchins, "Social Influence on Perception of Complex Drawings," *Journal of Social Psychology* 21 (1945): 257-75.

line of study, Farnsworth and Beaumont demonstrated that aesthetic evaluation of paintings was significantly affected by a statement of their commercial value.¹² Not least, the study in rumor transmission by Allport and Postman contains abundant evidence of the role of both verbal and nonverbal parts on the perception of the whole.¹³

The Newspaper Headline. In an experiment by Tannenbaum, two stories were planted on a regular front page of a college daily.¹⁴ Three different headlines, each emphasizing a separate segment of the story, were presented to different groups of subjects with the main body of the story held constant. One story, for example, dealt with a report of a day's proceedings in a murder trial, with one headline indicating innocence of the defendant, one guilt, and the third noncommittal.

Differential effects of the headline, in reply to a question regarding the innocence or guilt of the defendant, were significant beyond the 5 percent level. On the other story, the headline effect was significant at the .15 level. It was also shown that the effect of the headline was inversely related to the extent to which the story was read—i.e., the more thorough the reading, the less the effect of the headline per se, and vice versa.

The Newscast "Lead." Tannenbaum and Kerrick repeated the headline experiment in the form of a radio newscast.¹⁵ A regular newscast was written from the front-page stories, including the two experimental items. Three variations of the newscast were recorded, the variable being the introductory statement or "lead" to the experimental stories. Here again, differences in the effect of the "lead" index were significant beyond the 5 percent level. No significant effect was noted on the second story, but this can be attributed to the fact that we were

¹² P. R. Farnsworth and H. Beaumont, "Suggestion in Pictures," *Journal of General Psychology* 2 (1929): 362-66.

¹³ G. W. Allport and L. Postman, *The Psychology of Rumor* (New York: Holt, 1947).

¹⁴ P. H. Tannenbaum, "The Effect of Headlines on the Interpretation of News Stories," *Journalism Quarterly* 30 (1953): 189-97.

¹⁵ P. H. Tannenbaum and Jean S. Kerrick, "The Effect of the Lead on Radio Newscast Interpretation," *Journalism Quarterly* 31 (1954): 33-37.

dealing with well-structured attitudes that were not susceptible to change.

Picture Captions. Can slightly different captions alter the meaning of the same accompanying pictorial material?¹⁶ Using Osgood's semantic differential technique¹⁷ as the measuring device, this problem was investigated with five selected pictures of the Thematic Apperception Test. Each picture was presented in three variations: without a caption, with a caption loading the meaning in one direction, and with a caption loading the meaning in the opposite direction.

The results showed a significant index effect of the two opposing captions¹⁸ on the direction of loading on the intended scales (e.g., toward *happy* in the case of a picture captioned AT THE STATION: REUNION, and toward *sad* when the caption was AT THE STATION: PARTING). Moreover, the effect of the caption generalized to other scales so that the total interpretation was congruent with the aspect made explicit in the caption. In some instances where the caption was quite opposite to the basic content of the picture, the effect was sufficient to cause a shift in judgment in the direction of the caption.

The Word "But." In another study in verbal indexing, the effect of a single word—the common conjunction "but"—immersed in a stream of conversation was studied.¹⁹ A tape recording was made of two individuals discussing the use of radio for adult educational purposes. The script was written in this manner: One discussant would make a point, then the second discussant would say something of the order of: "I agree with you BUT . . .", and would then proceed to make essentially the same point but in somewhat different words. In this manner the discussion went back and forth—first one person making a point, and then the other indicating agreement, adding the

¹⁶ This study was conducted by Jean S. Kerrick.

¹⁷ C. E. Osgood, "The Nature and Measurement of Meaning," *Psychological Bulletin* 49 (1952): 197-237.

¹⁸ For reasons of economy, the actual results of this and the following experiments are not reported. In most cases, these results can be presented only in the form of lengthy and numerous tables. Interested readers may obtain the actual results by contacting the writer.

¹⁹ This study was conducted by the writer.

word "but," and proceeding to make the same point with a different vocabulary.

Two recordings of this conversation were made. One was left intact and the other was edited so that all the "but's" were deleted. The two recordings, then, were identical except for the absence or presence of the index word. Two groups of subjects were exposed to the respective tapes and, following exposure, were asked a series of questions relating to the content. The main question for purposes of analysis was: "Is it your opinion that the discussants agreed with each other or that they disagreed?" A chi-square analysis of the replies indicated a significant difference between the two groups beyond the 5 percent level, with the index word "but" apparently creating a predisposition of disagreement.

Nonverbal Indexes

Most people exposed to an undergraduate psychology course are well acquainted with the common optical illusions to be found in most texts—e.g., the Muller-Lyre, Poggendorf, and Zollner illusions.²⁰ These are prime examples of the effect of nonverbal indices in visual perception. Similarly, the more recent experiments in social perception contain evidence of nonverbal indexing. Bruner and Postman found that the presence of differently valued symbols (a swastika, a dollar sign, and an abstract geometric design) drawn on identically sized discs influenced the perceived size of those discs.²¹ In the same way, the studies of Ansbacher²² and of Bruner and Goodman²³ on the perceived size of postage stamps and coins, respectively, can be considered as cases of indexing.

Political Symbols. As part of a study in pictorial symbolism, the effect of commonly used political symbols on judgments of

²⁰ See E. G. Boring, *Sensation and Perception in the History of Experimental Psychology*.

²¹ J. S. Bruner and L. Postman, "Symbolic Value as an Organizing Factor in Perception," *Journal of Social Psychology* 27 (1948): 203-8.

²² H. Ansbacher, "Number Judgment of Postage Stamps: A Contribution to the Psychology of Social Norms," *Journal of Psychology* 5 (1938): 347-50.

²³ J. S. Bruner and C. C. Goodman, "Value and Need as Organizing Factors in Perception," *Journal of Abnormal and Social Psychology* 42 (1947): 33-44.

various animal drawings was investigated.²⁴ The animals dealt with were the bear, eagle, lion, donkey, and elephant. To various groups of subjects the following modes of presentation were offered for each animal for judgment on the semantic differential: (a) drawing of the animal itself (e.g., plain drawing of the bear); (b) drawing of the animal in a typical nonpolitical situation (e.g., a dancing bear); and (c) political cartoon of the animal (e.g., the Russian bear, with the hammer-and-sickle symbol clearly indicated on his chest). In addition, subjects rated the orthographic forms of the symbol and the thing symbolized—e.g., the word "bear" and the word "Russia."

The results clearly indicate significant differences between the profiles of judgment for the three forms of pictorial representation. And, whereas judgments of the nonpolitical symbols showed some evidence of compromise (e.g., judgments of the dancing bear shifted from those of the plain drawing of the bear only on those scales of the semantic differential appropriate to the stereotyped situation), judgments of the political drawings showed no such compromise, differing on almost all of the ten scales from those of the other two stimulus situations. Indeed, the profile of the political cartoon of the bear was almost identical with that for the word "Russia." It is to be noted that subjects were asked to judge the *total* drawing.

Color. Can different colors significantly alter the judgments of articles with which they are associated? ²⁵ A latin-square analysis of variance design was set up in which five nationally advertised products (a shirt, ice cream, rug, automobile, and cake) and a control (color spot)—making six objects of judgment—were judged by six groups of subjects against twenty bipolar scales of the semantic differential. Subjects were instructed to rate the *products* only. The same design was applied to four different conditions of color usage—intense (80 percent saturation) color in product, pale (20 percent saturation) color in product, intense color in background, and pale color in background. Separate analyses were conducted for each scale under each condition.

²⁴ This study was conducted by the writer and Jean S. Kerrick.

²⁵ This study was conducted by Charles E. Osgood and the writer.

The findings of this study can be summarized as follows. (a) Using the product-color interaction as the error term, *F*-values between colors were significant for several of the nonevaluative²⁶ descriptive scales such as warm-cool, heavy-light, rough-smooth, flimsy-sturdy and exciting-dull, and only for the condition of intense color on product; using the less stringent error term of within-cells variance, several additional scales, still nonevaluative ones, showed significant color effects. (b) Particularly on the evaluative scales (e.g., good-bad, tasty-distasteful, etc.) the color-product interaction was the significant factor, indicating the importance of selecting appropriate, culturally accepted colors to go with particular advertised products. (c) Pastel colors, both in the product and background, elicited small but consistently more favorable judgments.

Music. A recently completed experiment indicates that background music can have a significant effect on the impact of dramatic material presented over television.²⁷ Three conditions of presentation of a one-act play were used: the stage presentation, a one-camera kinescope recording made at the same time as the stage presentation with the single camera situated on the center aisle of the theater, and a two-camera studio presentation utilizing all the techniques of TV production, including close-ups, super-imposed images, etc. Six groups of subjects were employed—three groups for the conditions indicated, and another three groups where an appropriate musical background score was *added* to the presentation. Subjects were asked to rate the play, as such, on ten selected scales of the semantic differential.

The results indicate that the musical index was not effective on the evaluative judgments, but that it exercised a significant effect over all three conditions of presentation in terms of judgments of the strength or potency of the drama and along an active-passive continuum. For the particular play and the particu-

²⁶ The terms "nonevaluative" and "evaluative," as used here in application to the scales of the semantic differential, are based on the relative loadings of these scales on a set of empirically derived factors. See C. E. Osgood, *Report on Development and Application of the Semantic Differential* (Urbana: Institute of Communication Research, University of Illinois, 1953).

²⁷ This study was conducted by the writer.

lar music used, the music background effect was one of making the play appear stronger and more active. No significant interaction between the music and the presentation was indicated.

Discussion

It is apparent from the foregoing results that what we have referred to as the indexing process is a general phenomenon that may be operative in many kinds of communication situations. In each of the seven experimental studies reported, the manipulation of a single index under conditions of single communication exposures produced significant effects on the judgments of the total message. These findings are somewhat spectacular in themselves. They are even more so when we consider the implications they hold for the more common communication situations where we have repeated exposures to similar, related messages, each accompanied by a number of cues pointing in the same direction. Under such conditions, the cumulative index effects may completely dominate the interpretation of the communication.

What is the mechanism by which an index exercises its influence on the perception of messages, and thus on their effects? As part of the general body of perception theory, this is still an unresolved issue. Similarly, lacking a precise knowledge of the dynamics of the communication process, it is impossible to give a complete account of the functioning of the indexing process in communication.

However, within the domain of the communication studies reported here, there are certain aspects of its operation that become evident. To begin with, an index does not achieve its status as an index merely by virtue of being a part—even a highly structured part—of the total stimulus content and structure. It is effective as an index to the extent, first, that it has meaning for the recipient of the message. In other words, it is the significance or meaning that the communicatee attributes to the particular message segment—and not its mere existence as a message segment—that is of importance. And, second, it is the way in which the communicatee then integrates his meaning of this

one segment into his interpretation of the total message that promotes its influence. It is not the communicator's or the experimenter's decision that determines what is and what is not an index. It is the communicatee's or subject's meaning and consequent utilization thereof that is the critical factor.²⁸ It follows, then, that if two individuals have different meanings of the particular message part under consideration, the functioning of this part as an index will differ in kind if not in extent. Similarly, if one individual utilizes this part in his final interpretation of the message more than the other, then the difference will be in extent.

In a sense, most message parts may be considered as indices, since it is reasonable to assume that the final interpretation of a communication is a result of the integration of the meanings and significances of its individual units. But the notion of an indexing process, as advanced here, is that some parts may *exercise an inordinate effect* in this integrative process, and that their "contribution" to the final meaning may be out of all proportion to that of the other parts. It is when a message part exercises such excessive influence that we refer to it as an index.

For analytic purposes, the indexing process may be conveniently considered within the general framework of Osgood's mediation theory.²⁹ Figure 1 represents a symbolic model. The cues of the message (S_1, S_2, \dots, S_n) each elicit mediational processes ($r_m \longrightarrow S_m$) within the individual exposed to them, according to previous experience. Each of these mediation processes represents, at this level, the meaning or significance of that cue for that individual. Within the context of a communication message, the mediating reactions (r_m) of the cues may be

²⁸ For similar and more thorough expressions of this view, see D. Krech and R. S. Crutchfield, *Theory and Problems of Social Psychology* (New York: McGraw-Hill, 1948), pp. 81ff. on their treatment of structural and functional factors in perception, and Bruner, "Personality Dynamics and the Process and Perceiving," pp. 131-33, on his discussion of relevant and nonrelevant cues.

²⁹ See Osgood, *Method and Theory in Experimental Psychology*, for the general learning theory model, and his article, "The Nature and Measurement of Meaning," for an application to the communication process. A more elaborate treatment is to be found in *A General Model of the Human Communication Process* (Urbana: Institute of Communication Research, University of Illinois, 1953).

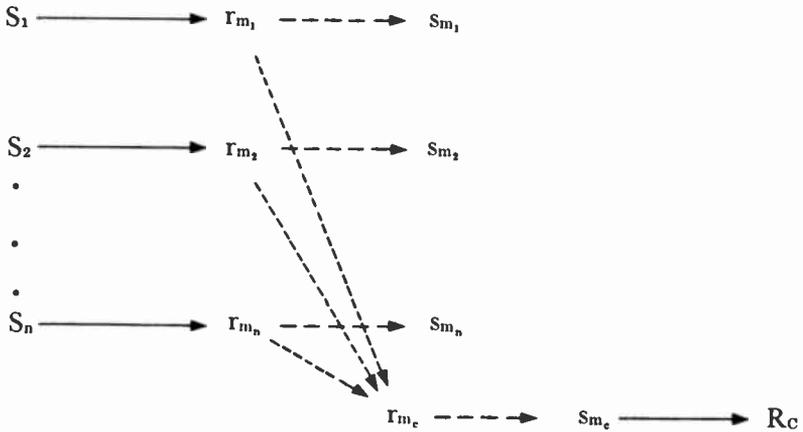


FIGURE 1. SYMBOLIC ACCOUNT OF THE DEVELOPMENT OF THE SIGNIFICANCE OF A COMMUNICATION

further thought of as becoming integrated into a higher-order mediating reaction to the communication per se. This mediating reaction (r_{m_c}) produces a distinctive pattern of self-stimulation (S_{m_c}) which is at once the awareness or significance of the message and a necessary condition for evoking appropriate responses (R_c), such as, e.g., ratings on an attitude scale in a typical experimental situation.

Thus this central mediation process represents a distinct psychological state of the individual at a given time. As outlined above, this state is the representation of the meaning of the message—i.e., how it is decoded by its recipient. On the encoding side, it represents the intentions of the communicator.

The particular mediating reaction thus elicited is obviously only one of a number of such available reactions. In other words, just as there may be a number of different meanings of a single sign or cue, there are also a number of different significances within a mature individual's repertoire for the particular message. That is, the particular r_{m_c} elicited is only one of a number of such possible mediating reactions, each of which has associated with it its own distinctive pattern of self-stimulation, and thus may lead to differential meanings and responses. This

set of possible reactions may be thought of as belonging to a *hierarchy*. The specific reaction that, for some reason or other, goes to the top of the hierarchy in a given communication situation, is the one that is responsible for the specific meaning attributed to that message, or for the way in which it is perceived.

Within this general paradigm, presented here all too briefly, the indexing process may be operationally stated. A message part serving as an index is one which selectively sensitizes a particular perception of the message by channeling a particular mediating reaction to the top of the hierarchy. To put it another way, the hierarchy may be considered as a set of possible reactions each with a certain probability of occurrence at a given time. An index serves to raise the probability of one of these reactions occurring over all others. In Figure 1, each of the cues shown tends to produce a single mediating reaction to the communication. Let us suppose, however, that another in this set of message cues, say S_k , exercises a more profound effect than the other cues combined, and leads to the evoking of a different mediating reaction to the communication (r_{mc_k}) which has a higher probability of occurrence. This mediating reaction will produce its own stimulation (S_{mc_k}) and will thus lead to a different response. We then speak of S_k as an index.

This analysis still fails to define the mechanism by which an index influences the probabilities or how it channels a particular reaction to the top of the hierarchy. It is the writer's contention that the mechanics of this process rest in the neurophysiological system of the individual, and will ultimately have to be accounted for on that microscopic level of analysis. For example, it may well be that in the case of sequentially organized messages where the index appears at the beginning of the message—e.g., the "lead" in the radio newscast study—the operation of the index may be accounted for on the basis of a *stimulus trace* persisting through time in the central nervous system. Such a notion is entirely plausible, but for the present is only speculative.

RAYMOND A. BAUER

*The Obstinate Audience:
The Influence Process
from the Point of View
of Social Communication*

A piece of research by Bauer and Zimmerman, published in 1956 under the title, "The Effects of an Audience on What Is Remembered," did as much as any single study to bring to an end the concept of the audience as inactive. This study demonstrated not only that people remember communication in a highly selective way, but also that they process and select new information with an eye to their perceived relationship to future audiences. Specifically, they are less likely to remember information that would conflict with the audience's views than they are to remember information to which they believe the audience would be hospitable. Future journalists, already sensitized to their audiences, displayed this behavior to a greater extent than future teachers. These results were illuminating and, in some quarters, shocking. The article in the following pages is later than the Zimmerman-Bauer experiment, and sums up some of the other research that went into changing the prevalent concept of audiences. It was published in the *American Psychologist* 19 (1964): 319-28, and copyrighted by that journal. It is reprinted by permission of the journal and the author. Dr. Bauer is professor of psychology in the graduate school of business administration at Harvard, and senior consultant to the National Goals Research staff.

NOT LONG AGO, Henry Murray, in an address entitled, "The Personality and Career of Satan," gibed at psychologists for undertaking Satan's task of shattering man's faith in his own potentialities:

Man is a computer, an animal, or an infant. His destiny is completely determined by genes, instincts, accidents, early conditioning and reinforcements, cultural and social forces. Love is a secondary drive based on hunger and oral sensations or a reaction formation to an innate underlying hate. . . . If we psychologists were all the time, consciously or uncon-

sciously, intending out of malice to reduce the concept of human nature to its lowest common denominators . . . then we might have to admit that to this extent the Satanic spirit was alive within us.¹

Isidor Chein, too, sides with the humanist against the scientist in psychology:

among psychologists whose careers are devoted to the advancement of the science, the prevailing image of Man is that of an impotent reactor. . . . He is implicitly viewed as robot. . . .

The opening sentence of *Ethical Standards of Psychologists* is that, "the psychologist is committed to a belief in the dignity and worth of the individual human being." . . .

But what kind of dignity can we attribute to a robot?²

The issue is not, however, whether the *findings* of social science do and should have an influence on how we run our lives and think about ourselves, an influence to a certain extent inevitable and, to some, desirable. The real issue is whether our social model of man—the model we use for running society—and our scientific model or models—the ones we use for running our subjects—should be identical. That the general answer should be "No," I learned when working on my doctoral thesis,³ which was a chronology of Soviet attempts to keep the social and scientific models of man in line with each other, for I became soberly aware then of the delicacy and complexity of the relationship of the social and the scientific models of man.

I shall here discuss the relationship of these two models in the area of social communication. I shall set up two stereotypes. First, the social model of communication: the model held by the general public, and by social scientists when they talk about advertising, and somebody else's propaganda, is one of the exploitation of man by man. It is a model of one-way influence: the communicator *does* something to the audience, while to the communicator is generally attributed considerable lati-

¹ H. A. Murray, "The Personality and Career of Satan," *Journal of Social Issues* 18 (1962): 1-35.

² I. Chein, "The Image of Man," *Journal of Social Issues* 18 (1962): 36-54.

³ R. A. Bauer, *The New Man in Soviet Psychology* (Cambridge: Harvard University Press, 1952).

tude and power to do what he pleases to the audience. This model is reflected—at its worst—in such popular phrases as “brainwashing,” “hidden persuasion,” and “subliminal advertising.”

The second stereotype—the model which *ought* to be inferred from the data of research—is of communication as a transactional process in which two parties each expect to give and take from the deal approximately equitable values. This, although it *ought* to be the scientific model, is far from generally accepted as such, a state of affairs on which W. Philips Davison makes the comment:

The communicator's audience is not a passive recipient—it cannot be regarded as a lump of clay to be molded by the master propagandist. Rather, the audience is made up of individuals who demand something from the communications to which they are exposed, and who select those that are likely to be useful to them. In other words, they must get something from the manipulator if he is to get something from them. A bargain is involved. Sometimes, it is true, the manipulator is able to lead his audience into a bad bargain by emphasizing one need at the expense of another or by representing a change in the significant environment as greater than it actually has been. But audiences, too, can drive a hard bargain. Many communicators who have been widely disregarded or misunderstood know that to their cost.⁴

Davison does not contend that all the exchanges are equitable, but that the inequities may be on either side. He only implies that neither the audience nor the communicator would enter into this exchange unless each party expected to “get his money's worth,” at least most of the time. After all, Davison is not speaking as a social philosopher or as an apologist for the industry, but as an experienced researcher trying to make sense out of the accumulated evidence.

Whether fortunately or unfortunately, social criticism has long been associated with the study of communication. The latter was largely stimulated by the succession of exposés of prop-

⁴ Davison, W. P. “On the Effects of Communication,” *Public Opinion Quarterly* 23 (1959): 360.

aganda following World War I, particularly of the munitions-makers' lobby and of the extensive propaganda of the public utilities. There was also social concern over the new media, the movies and radio, and the increasingly monopolistic control of newspapers. Propaganda analysis, which is what research communication was called in those days, was occupied with three inquiries: the structure of the media (who owns and controls them, and what affects what gets into them); content analysis (what was said and printed); and propaganda techniques (which are the devil's devices to influence people). In this period, *effects* for the most part were not studied: they were taken for granted. Out of this tradition evolved Lasswell's formulation of the process of communication that is the most familiar one to this day: "Who says what, through what channels [media] of communication, to whom [with] what . . . results."⁵ This apparently self-evident formulation has one monumental built-in assumption: that the initiative is exclusively with the communicator, the effects being exclusively on the audience.

While the stimulus and the model of research on communication were developing out of the analysis of propaganda, survey research, relatively independently, was evolving its technology in the commercial world of market research and audience and leadership measurement. As is well known, Crossley, Gallup, and Roper each tried their hands at predicting the 1936 presidential election and whipped the defending champion, the *Literary Digest*. By 1940, Lazarsfeld was ready to try out the new technology on the old model with a full-scale panel study of the effects of the mass media on voting in a national election, having tested his strategy in the New Jersey gubernatorial race in 1938.

The results of this study, again, are well known. Virtually nobody in the panel changed his intention, and most of the few who did so attributed it to personal influence.⁶ The mass

⁵ B. L. Smith, H. D. Lasswell, and R. D. Casey, *Propaganda, Communication and Public Opinion* (Princeton: Princeton University Press, 1946), p. 121.

⁶ P. F. Lazarsfeld, B. Berelson, and Hazel Gaudet, *The People's Choice* (New York: Columbia University Press, 1948).

media had had their big chance—and struck out. Negative results had been reached before but none which had been demonstrated by such solid research. A number of equally dramatic failures to detect effects of campaigns carried on in the mass media followed, and by the end of the decade Hyman and Sheatsley were attempting to explain why.⁷ No one could take the effects of communication for granted.

As a matter of fact a considerable number of the sociologists studying communication grew discouraged with inquiring into the immediate effects of the mass media and went looking for "opinion leaders," "influentials," the "web of influence," and so on. At the same time, a few here and there began doing something we now call "functional studies." They were curious to know how the audience was behaving.

In the meantime, at just about the time that the students of the effect of communication in a natural setting were beginning to wonder if communication ever had effects, experimental studies were burgeoning under essentially laboratory conditions. Experiments had been conducted before, but the tradition of experimenting on the effects of communication was vastly enhanced by the War Department's Information and Education division, and after the war by Hovland and his associates at Yale.⁸ The Yale group's output, and that of colleagues and students of Kurt Lewin, account for a very high proportion of the experimental work on the subject in the past two decades.

The experimenters generally had no trouble conveying information or changing attitudes. Of course nobody stopped to record very explicitly the main finding of all the experiments: that communication, given a reasonably large audience, varies in its impact. It affects some one way, some in the opposite way, and some not at all. But nevertheless the experimenters got results.

By the end of the 1950's it was quite clear that the two

⁷ H. H. Hyman and P. B. Sheatsley, "Some Reasons Why Information Campaigns Fail," *Public Opinion Quarterly* 11 (1947): 412-23.

⁸ C. I. Hovland, A. A. Lumsdaine, and F. D. Sheffield, *Experiments in Mass Communication* (Princeton: Princeton University Press, 1949).

streams of investigation needed reconciling, and Carl Hovland did so.⁹ More recently, pursuing the same theme, I stated Hovland's major point as being that the audience exercises much more initiative outside the laboratory than it does in the experimental situation.¹⁰ The audience selects what it will attend to. Since people generally listen to and read things they are interested in, these usually are topics on which they have a good deal of information and fixed opinions. Hence the very people most likely to attend to a message are those most difficult to change; those who can be converted do not look or listen. A variety of studies attribute to this circumstance alone: the fact that actual campaigns have often produced no measurable results, while quite marked effects could be produced in a laboratory.

Two favorite problems of the laboratory experimenters take on quite a different aspect when considered in a natural setting. One is the question of the order of presentation of arguments. Is it an advantage to have your argument stated first (the so-called law of primacy) or stated last (the so-called law of recency)? In a laboratory the answer is complex, but it may be quite simple in a natural situation: he who presents his argument first may convert the audience and they in turn may exercise their oft-exercised prerogative of not listening to the opposing case. Hence to have the first word rather than the last could be decisive in the real world, but for a reason which may seem irrelevant to the relative merits of primacy versus recency.

Of course, another important variable is the credibility of the source. By creating an impression of the credibility of the stooge or experimenter in the laboratory, it is often possible to convert a person to a position far removed from his original one. But in real life, the audience usually does its own evaluation of sources, and at a certain point sometimes arrives at a result quite the opposite of that reached experimentally. If the audience is confronted with a communicator trying to convert

⁹ C. I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," *American Psychologist* 14 (1959): 8-17.

¹⁰ R. A. Bauer, "The Initiative of the Audience." Paper read at New England Psychological Association, Boston, November, 1962.

it to a position opposed to its own, it is likely to see him as "biased," and the like, and come away further strengthened in its own convictions.

It was quite clear from Hovland's piece, and should have been even earlier, that the characteristic behavior of the audience in its natural habitat is such as to bring about crucial modifications of the results seen in the laboratory. In general, these modifications are strongly in the direction of suppressing effect.

In a sense, Joseph Klapper's 1960 book, *The Effects of Mass Communication*, marks the end of an era. Twenty years earlier, a social scientist would have taken effects for granted and specified the devices the propagandist employed to achieve them. But Klapper makes statements like these: "[my position] is in essence a shift *away* from the tendency to regard mass communication as a necessary and sufficient cause of audience effects, toward a view of the media as influences, working amid other influences, in a total situation."¹¹ He sees communications as operating through mediating factors—group membership, selective exposure, defense mechanisms—"such that they typically render mass communication a contributory agent, but not the sole cause in a process of reinforcing the existing conditions. (Regardless of the condition in question . . . the media are more likely to reinforce [it] than to change)."¹² Change takes place, according to Klapper, in those rare circumstances when mediating forces are inoperative, when they are occasionally mobilized to facilitate change, or in certain residual situations. He reviews the literature on the effect of variation in content, mode of presentation, media, and so on, but rather than taking effects for granted, he searches for the exceptional case in which the mass media change rather than fortify and entrench.

Klapper recommends what he calls the "phenomenalistic" and others have called the functional approach. The study of communication has traditionally (although not exclusively)

¹¹ J. Klapper, *The Effects of Mass Communication* (Glencoe, Ill.: The Free Press, 1960), p. 5.

¹² *Ibid.*, p. 8.

been conducted from the point of view of the *effects intended by the communicator*. From this perspective, the disparity between actual and intended results has often been puzzling. The answer has come increasingly to be seen in entering the phenomenal world of the audience and studying the functions which communication serves. The failure in research to this point has been that the audience has not been given full status in the exchange: the intentions of its members have not been given the same attention as those of the communicator.

Some will argue that these generalizations do not hold true of advertising. They do. But until now no one has undertaken to match the effects of communication in various areas according to comparable criteria and against realistic expectation.

Actually much more is expected of the campaigns with which academic psychologists are associated than is expected of commercial promotion. For example, a paper on governmental informational campaigns concluded with these words: "while people are willing to walk into a drugstore and buy low calorie preparations and contraceptives, they are not very anxious to take shots for protection against polio or attend a clinic dealing with sexual hygiene."¹³ By the author's own figures, 60 percent of the public had had one or more polio shots and 25 percent had had the full course of four. According to his expectations, and probably ours, these were hardly satisfactory accomplishments.

Yet, what about the highly advertised product, low in calories, with which he was comparing polio inoculations? Presumably he had heard that it was a smashing commercial success, or had seen some dollar volume figure on gross sales. Actually, it was being bought by .4 percent of the market—and 60 percent and even 25 percent are larger figures than .4 percent. Our unacknowledged expectations must be reckoned with.

These differences in expectation and criteria produce much confusion, usually on the side of convincing people that com-

¹³ M. A. Seidenfeld, "Consumer Psychology in Public Service and Government." Symposium presented at American Psychological Association, New York, September, 1961.

mercial campaigns are more successful than others. Yet consistently successful commercial promotions convert only a very small percentage of people to action. No one cigarette now commands more than 14 percent of the cigarette market, but an increase of 1 percent is worth \$60,000,000 in sales. This means influencing possibly .5 percent of all adults, and 1 percent of cigarette smokers. This also means that a successful commercial campaign can alienate many more than it wins, and still be highly profitable.

Equally misleading is the frequent reference to percentage increase on some small base. This device has been a particular favorite of both the promoters and the critics of motivation research: one party does it to sell its services, the other purportedly to warn the public; both exaggerate the effect. Thus, for example, the boast, "a 300 percent increase in market share," means that the product increased; but it may easily be from 1 percent of the market to 3 percent. Or we may have a 500 percent gain in preference for "the new package" over the old one. That there is that much consensus in the aesthetic judgment of the American public is a matter of interest, but it tells nothing about the magnitude of consequences on any criterion in which we are interested. I have made some computations on the famous Kate Smith war bond marathon, which elicited \$39 million in pledges. Kate Smith moved apparently a maximum of 4 percent of her audience to pledge to buy bonds; the more realistic figure may be 2 percent! In the commercial world this is a rather small effect as judged by some expectations, but yet an effect which often adds up to millions of dollars.

But commercial promotions often do not pay their way. The word is currently being circulated that a mammoth corporation and a mammoth advertising agency have completed a well-designed experiment that proves the corporation has apparently wasted millions of dollars on promoting its corporate image. Some studies have shown that an increase in expenditures for advertising has, under controlled experimental conditions, produced a decrease in sales.

The truth is now out: that our social model of the process of communication is morally asymmetrical; it is concerned almost

exclusively with inequities to the advantage of the initiators, the manipulators. From the social point of view this may be all to the good. The answer to the question whether our social and scientific models should be identical is that there is no reason why we should be equally concerned with inequities in either direction; most of us consider it more important to protect the weak from the powerful than vice versa. However, no matter how firmly committed to a morally asymmetrical social model, investigators should note that inequities fall in either direction and in unknown proportions.

The combination of this asymmetry and the varying expectations and criteria mentioned earlier fortifies the model of a one-way exploitative process of communication. And it is probably further reinforced by the experimental design in which the subject is seen as *reacting* to conditions established by the experimenter. We forget the cartoon in which one rat says to another: "Boy, have I got this guy trained! Every time I push this bar he gives me a pellet of food." We all, it seems, believe that *we* train the *rats*. And while the meaning of "initiative" in an experimental situation may be semantically complicated, the experimenter is usually seen there as *acting* and the subjects as *reacting*. At the very least and to all appearances, the experimental design tends to entrench the model of influence flowing in one direction.

The tide is, in fact, turning, although as a matter of fact, it is difficult to say whether the final granting of initiative to the audience, which seems to be imminent, is a "turn" or a logical extension of the research work of the past twenty-five or thirty years. Obviously Davison and Klapper and others, such as the Rileys, Dexter and White, Charles Wright, and Talcott Parsons, regard their position as the logical conclusion of what has gone before rather than a drastic inversion. So-called "functional" studies are increasing in volume and appear now to be a matter of principle. In any event, Dexter and White, the editors of *People, Society, and Mass Communication*, are firmly committed to this point of view and have organized the book upon it.

Traditionally, the name "functional studies" has been ap-

plied to any work concerned with a range of consequences wider than or different from those intended by the communicator. Two early classics, both done in the 1940's, are studies of listening to daytime radio serials: one by Herta Herzog, and the other by Warner and Henry. They established that women used the radio serials as models for their behavior in real life. In the late 1940's, Berelson studied how people reacted to not having newspapers during a strike, work which Kimball replicated in the newspaper strike of 1948.¹⁴ The variety of functions the newspapers proved to serve is amazing, including the furnishing of raw material for conversation. "The radio is no substitute for the newspaper. I like to make intelligent conversation."¹⁵ There was also research on the adult following of comics,¹⁶ children's use of TV,¹⁷ and the reading of *Mad* magazine.¹⁸

From a cursory glimpse, one concludes that early functional studies suffered from a tendency to focus on the deviant. Or, put another way, functional or motivational analysis (motivation research can be regarded as a subdivision of functional analysis) was ordinarily evoked only when the stereotyped model of economic rational man broke down. The findings advanced scientific knowledge but did little to improve the image of man in the eyes of those committed to a narrow concept of economic rationality. We may well argue that the social scientists' model of man is in reality broader, more scientifically

¹⁴ Herta Herzog, "What Do We Really Know about Daytime Serial Listeners?" in P. F. Lazarsfeld and F. N. Stanton, eds., *Radio Research, 1942-43* (New York: Duell, Sloan & Pearce, 1944), pp. 3-33; W. L. Warner and W. E. Henry, "The Radio Daytime Serial: A Symbolic Analysis," *Genetic Psychology Monographs* 37 (1948): 3-71; B. Berelson, "What Missing the Newspaper Means," in P. F. Lazarsfeld and F. N. Stanton, eds., *Communications Research, 1948-49* (New York: Harper, 1949), pp. 111-29; P. Kimball, "People without Papers," *Public Opinion Quarterly* 23 (1959): 389-98.

¹⁵ *Ibid.*, p. 395.

¹⁶ L. Bogart, "Adult Talk about Newspaper Comics," *American Journal of Sociology* 61 (1955): 26-30.

¹⁷ Eleanor E. Maccoby, "Why Do Children Watch TV?" *Public Opinion Quarterly* 18 (1954): 239-44.

¹⁸ C. Winick, "Teenagers, Satire, and *Mad*," *Merrill-Palmer Quarterly* 8 (1962): 183-203.

based, and even more compassionate; but the public may not think so.

Thus the early functional studies added to knowledge of the process of communication by including effects intended by the audience. There is a question, however, as to what they did to the social model of the process. Certainly the work of motivation research was written up in such a way as to confirm the exploitative model. But more recent functional studies focus on ordinary aspects of communication and present the audience in a more common, prosaic, and, therefore, more sensible light.

Meanwhile, new trends have been developing in psychological research on communication. Until about a decade ago, the failure of experimental subjects to change their opinions was regarded as a residual phenomenon. Little systematic or sympathetic attention was paid to the persistence of opinion. The considerable volume of recent research using what the Maccobys call a homeostatic model¹⁹ is dominated by theories based on the psychology of cognition, Heider's balance theory, Festinger's dissonance theory, Osgood and Tannenbaum's congruity theory, and Newcomb's strain for symmetry. While the proponents of each theory insist on adequate grounds on their distinctiveness, all agree that man acts so as to restore equilibrium in his system of belief. In any event, homeostatic studies do finally accord some initiative to the audience. Specifically, they reveal individuals as deliberately seeking out information on persons either to reinforce shaken convictions or consolidate those recently acquired. Festinger, for example, is interested in the reduction of dissonance following upon decisions—which means he views people as reacting to their own actions as well as to the actions of others. This influx of new ideas and new research is a valuable and welcome addition to both the theory and practice of social communication.

Restoring cognitive equilibrium is, however, only one of the tasks for which man seeks and uses information. Furthermore, the homeostatic theories, while according initiative to the audi-

¹⁹ N. Maccoby and Eleanor E. Maccoby, "Homeostatic Theory in Attitude Change," *Public Opinion Quarterly* 25 (1961): 535-45.

ence, make it peculiarly defensive. They do little to counteract the notion of a one-way flow of influence—although it must be conceded that a scientific model is under no moral obligation to correct the defects, if any, of the social model.

Much is gained by looking upon the behavior of the audience as full-blown problem solving. Such a viewpoint requires the assumption that people have more problems to solve than simply relating to other people and reducing their psychic tension, among them being the allocation and conservation of resources.

The mass media have long been criticized because they facilitate escape from the responsibilities of the real world. But Katz and Foulkes point out that if man is to cope adequately with his environment, he must on occasion retreat to gather strength.²⁰ Hence, escape per se is not a bad thing. It is socially approved to say, "Be quiet! Daddy is sleeping," although not yet approved to say, "Be quiet! Daddy is drinking." They take a generally irresponsibly handled problem of social criticism and convert it into one of the allocation and conservation of resources. It would take close calculation to decide whether an hour spent drinking beer in front of the TV set would, for a given individual, result in a net increase or decrease in his coping effectively with the environment. Yet while the data they require are manifestly unattainable, their very way of posing the problem raises the level of discourse.

The necessity for taking explicit cognizance of the audience's intention was forced on us when we were studying Soviet refugees. We knew that virtually every Soviet citizen was regularly exposed to meetings at which were conveyed a certain amount of news, the party line on various issues, and general political agitation and indoctrination. In free discussion our respondents complained endlessly of the meetings so we knew they were there. But when we asked them, "From what sources did you draw most of your information about what was happening?" only 19 percent specified them, in contrast to 87 percent citing newspapers, 50 percent citing radio, and another 50 per-

²⁰ E. Katz and D. Foulkes, "On the Use of the Mass Media for 'Escape,'" *Public Opinion Quarterly* 26 (1962): 377-88.

cent word of mouth.²¹ Gradually the obvious dawned on us; our respondents were telling us where they learned what *they* wanted to know, not where they learned what the regime wanted them to know.

A similar perplexity arose with respect to the use of word-of-mouth sources of information. It was the least anti-Soviet of our respondents who claimed to make most use of this unofficial fountain of information. Rereading the interviews, and further analysis, unraveled the puzzle. It was the people most involved in the regime, at least in the upper social groups, who were using word-of-mouth sources the better to understand the official media, and the better to do their jobs!²² As a result we had to conduct analysis on two levels, one where we took into account the intentions of the regime, the other, the intentions of the citizen. Thus, viewed from the vantage point of the regime's intention, the widespread dependence upon word of mouth was a failure in communication. From the point of view of the citizen and what he wanted, his own behavior made eminent sense.

At the next stage, we benefited from the looseness of our methods, the importance of the people we were studying, and from highly imaginative colleagues from other disciplines. We were studying the processes of decision, communication, and the like, in the business and political community. As we studied "influence" by wandering around and getting acquainted with the parties of both camps, and kept track of what was going on, the notion of a one-way flow became preposterous. A congressman, for example, would snort: "Hell, pressure groups? I have to roust 'em off their fat rears to get them to come up here." It also became clear that men in influential positions did a great deal to determine what sort of communication was directed toward them.²³ At this juncture, Ithiel de Sola Pool crystallized the proposition that the audience in effect influences

²¹ A. Inkeles and R. A. Bauer, *The Soviet Citizen* (Cambridge: Harvard University Press, 1959), p. 163.

²² *Ibid.*, p. 161.

²³ R. A. Bauer, I. de Sola Pool, and L. A. Dexter, *American Business and Public Policy* (New York: Atherton Press, 1963).

the communicator by the role it forces on him. This idea became the organizing hypothesis behind the Zimmerman and Bauer demonstration that individuals process new information as a function of their perceived relationship to future audiences.²⁴ Specifically, they are less likely to remember information that would conflict with the audience's views than they are to remember information to which the audience would be hospitable.

The final crystallization of my present views began several years ago when a decision theorist and I together reviewed the studies by motivation researchers of the marketing of ethical drugs to doctors. Surprisingly, I found the level of motivation discussed in these reports quite trivial, but the reports provided perceptive cognitive maps of the physician's world and the way he went about handling risk. The now well-known studies of the adoption of drugs by Coleman, Menzel, and Katz²⁵ contributed data consistent with the following point: physicians become increasingly selective in their choice of information as risk increases either because of the newness of the drug or difficulty in assessing its effects. Thereupon, a group of Harvard business school students (in an unpublished manuscript) established by a questionnaire survey that as the seriousness of the disease increased, physicians were increasingly likely to prefer professional to commercial sources of information.

Parenthetically with respect to the Coleman, Menzel, and Katz studies whose data I said are "consistent with" the notion of risk handling: I am convinced that this way of thinking is wholly compatible to the authors. Yet their presentation is sufficiently dominated by the prevailing view of "social influence" as a matter of personal compliance that one cannot be entirely sure just where they do stand.

Why doesn't the physician always prefer professional to commercial sources of information? The physician is a busy man

²⁴ Claire Zimmerman and R. A. Bauer, "The Effects of an Audience on What Is Remembered," *Public Opinion Quarterly* 20 (1956): 238-48. This experiment was replicated by Schramm and Danielson.

²⁵ J. Coleman, H. Menzel, and E. Katz, "Social Processes in Physicians' Adoption of a New Drug," *Journal of Chronic Diseases* 9 (1959): 1-19.

whose scarcest resources are time and energy, two things which commercial sources of information, on the whole, seem to help him conserve. Even so, he is selective. Let us assume two components in the choice of source of information: social compliance and the reduction of risk. Consider, then, that the doctor may be influenced by his liking either for the drug company's salesman who visits his office, or for the company itself. We may assume that, of these two components of influence, social compliance will be more associated with his sentiments toward the salesman and risk reduction with the company's reputation.

In a study conducted with the Schering Corporation,²⁶ I found that in the case of relatively riskless drugs, the correlation of preference for drugs with preference for salesman and for company was about equal. However, with more hazardous drugs—and with large numbers of subjects—preference for the company carried twice the weight of preference for the salesman: the physicians selected the source closest associated with reduction of risk.

In the latest and fullest development of this point of view, Cox asked approximately 300 middle-class housewives to evaluate the relative merits of "two brands" of nylon stockings (Brand N & Brand R) as to overall merits and as to each of eighteen attributes.²⁷ After each rating the subject was asked to indicate how confident she was in making it. The subjects then listened to a tape-recorded interview with a supposed salesgirl who stated that Brand R was better as to six attributes, whereupon they were asked to judge the stockings again and to evaluate the salesgirl and their confidence in rating her. Finally, they completed a questionnaire which included three batteries of questions on personality, one of which was a measure of self-confidence.

The findings of interest here bear upon personality and persuasibility. Male subjects low in generalized self-confidence are

²⁶ R. A. Bauer, "Risk Handling in Drug Adoption," *Public Opinion Quarterly* 25 (1961): 546-59.

²⁷ D. F. Cox, *Information and Uncertainty: Their Effects on Consumers' Product Evaluations* (unpublished Ph.D. dissertation, Harvard University, Graduate School of Business Administration, 1962).

generally the more persuasible. Females are more persuasible in general but on the whole this is not correlated with self-confidence or self-esteem.

The reigning hypotheses on the relationship of self-confidence to persuasibility have been based either on the concept of ego defense²⁸ or social approval,²⁹ and Cox chose to add *perceived self-confidence in accomplishing a task*. He was dealing, then, with two measures of self-confidence: generalized self-confidence, presumably an attribute of "personality"; and specific self-confidence, that is, perceived confidence in judging stockings.

It has been suggested that the reason that in women personality has not been found correlated with persuasibility is that the issues used in experiments have not been important to them. And importance may account for the strong relationship Cox found when he gave them the task of rating stockings. That he was testing middle-class housewives may be why the relationship was curvilinear. (That is to say, his subjects may have covered a wider range of self-confidence than might be found in the usual experimental groups.) Women with *medium* scores on the test of self-confidence were the most likely to alter their rating of the stockings in the direction recommended by the salesgirl; those scoring *either* high or low were less likely to accept her suggestion. As a matter of fact, counter-suggestibility apparently crept in among the women low in self-confidence; those who rated lowest were almost three times as likely as the others to change in the *opposite* direction. Since these findings were replicated in three independent samples, ranging from 62 to 144 subjects, there is little reason to question them for this type of person and situation. The differences were both significant and big.

The curvilinear relationship was not anticipated and any explanation must, of course, be ad hoc. One might be that, faced

²⁸ A. R. Cohen, "Some Implications of Self-Esteem for Social Influence," in C. I. Hovland and I. L. Janis, eds., *Personality and Persuasibility* (New Haven: Yale University Press, 1959), pp. 102-20.

²⁹ I. L. Janis, "Personality Correlates of Susceptibility to Persuasion," *Journal of Personality* 22 (1954): 504-18.

with the difficult task of judging between two identical stockings and the salesgirl's flat assertion that one was better than the other, the women tacitly had to ask themselves two questions: Do I need help? Am I secure enough to accept help? Accordingly, the subjects most likely to accept the salesgirl's suggestion would be those with little enough self-confidence to want help, but still with enough to accept it. As an explanation, this is at least consistent with the curvilinear data and with the apparent counter-suggestibility of the subjects with little self-confidence.

This explanation, however, should not apply to individuals confident of their ability to perform the task. And this turned out to be the case. Among the subjects confident they could perform the *specific* task, generalized self-confidence played little or no role. The usual notions of social compliance and ego defense were virtually entirely overridden by the subject's confidence in her handling of the task—a conclusion which is supported, no matter how the data are combined.

My intention in telling this is to present a promising experiment in regarding the audience as being involved in problem solving. As already suggested, theories of social communication are caught between two contrasting models of human behavior. One we may call the "influence" model: one person does something to another. We have partially escaped from the simplest version of it, and now regard the audience as influenced only in part, and in the other part solving problems of ego defense or of interpersonal relations. Meanwhile, there is the always endemic model of economic rationality which in one or another of its forms sees man as maximizing some tangible value. This latter, very simple problem-solving model we spontaneously use when we *judge* behavior, particularly with respect to whether it is rational or sensible or dignified. Thus, ironically, we use the influence model, or the modified influence model, to explain why people do what they do, but we use the economist's problem-solving model for evaluating the behavior. There is scarcely a surer way of making people look foolish!

There is no reason why the two models should not be seen as complementary rather than antagonistic. But the fusion has not

taken place to any conspicuous degree in the mainstream of research, as can be seen most clearly in literature on informal communication and personal influence. There are two major traditions from which this literature has developed.³⁰ One, that of the heartland of social communication, stresses social compliance and/or social conformity. The other tradition, that of rural sociology, is concerned with how farmers acquire knowledge useful in their day-to-day problems. While the two have in certain respects become intermeshed after some decades of isolation, overtones of social compliance and conformity persist in the social-psychological literature. There is little reference to problem-solving.

The students of one of my colleagues who had read a standard treatment of the role of reference groups in buying behavior discussed it entirely without reference to the fact that the consumers might want to eat the food they bought!

The virtue of Cox's data is that they enable us to relate the problem-solving dimensions of behavior to social relationships and ego defensive. It is interesting that—in this study—the more “psychological” processes come into play only at the point at which felt self-confidence in accomplishing the task falls below a critical point. Thus, tendency to accept the suggestions of the alleged salesgirl in Cox's experiment must be seen as a function of both ability to deal with the task and personality.

The difficulty of the task may either fortify or suppress the more “social-psychological” processes, depending on the specific circumstances. Thus, study of drug preference shows that as the task gets easier, the individual can indulge in the luxury of concurring with someone whom he likes, whereas when risk is great he has to concentrate on the risk-reducing potentialities of the source of information.

Thus the full-blown, problem-solving interpretation of the behavior of an audience in no sense rules out the problems with which students of communication have recently concerned themselves: ego defense and social adjustment. As a matter of

³⁰ E. M. Rogers, *Diffusion of Innovations* (Glencoe, Ill.: The Free Press, 1962).

fact, such problems seem explorable in a more profitable fashion if, simultaneously, attention is paid to the more overt tasks for which people use information. Yet, while there has been a consistent drift toward granting the audience more initiative, it cannot be said that the general literature on communication yet accords it a full range of intentions.

Of course, the audience is not wholly a free agent; it must select from what is offered. But even here, the audience has influence, since it is generally offered an array of communications to which it is believed it will be receptive. The process of social communication and of the flow of influence in general must be regarded as a transaction. "Transactionism," which has had a variety of meanings in psychology, is used here in the sense of an exchange of values between two or more parties; each gives in order to get.

The argument for using the transactional model for *scientific* purposes is that it opens the door more fully to exploring the intention and behavior of members of the audience and encourages inquiry into the influence of the audience on the communicator by specifically treating the process as a two-way passage. In addition to the influence of the audience on the communicator, there seems little doubt that influence also operates in the "reverse" direction. But the persistence of the one-way model of influence discourages the investigation of both directions of relationship. With amusing adroitness some writers have assimilated the original experiment of Zimmerman and Bauer to established concepts such as reference groups, thereby ignoring what we thought was the clear implication of a two-way flow of influence.

At our present state of knowledge there is much to be said for the transactional model's pragmatic effect on research, but at the same time it is the most plausible description of the process of communication as we know it. Yet there seems to be a tendency to assume that words such as "transaction," "reciprocity," and the like imply exact equality in each exchange, measured out precisely according to the value system and judgment of the observer. This is nonsense. Obviously there are inequities, and they will persist, whether we use our own value

systems as observers or if we have perfect knowledge of the people we observe.

The rough balance of exchange is sufficiently equitable in the long run to keep *most* individuals in our society engaged in the transactional relations of communication and influence. But some "alienated" people absent themselves from the network of communication, as do, also, many businessmen who have doubts about the money they spend on advertising. The alienation is by no means peculiar to one end of the chain of communication or influence.

This point of view may be taken as a defense of certain social institutions such as advertising and the mass media. There is a limited range of charges against which *impotence* may indeed be considered a defense. Once more, ironically, both the communicator and the critic have a vested interest in the exploitative model. From the point of view of the communicator, it is reassuring that he will receive *at least* a fair return for his efforts; to the critic, the exploitative model gratifies the sense of moral indignation.

II

*The Nature of
Communication Effects*

DONALD F. ROBERTS

WHEN PREHISTORIC MAN sat before his campfire describing to his son the most efficient way of stalking a prey, one of his concerns was the effect his lesson would have on the child. When the medieval court jester practiced a new trick or learned a new joke, he was concerned with how his communications would be received by members of the court. When a presidential candidate rewrites a speech for the second or third time, carefully stages the speaker's platform, and hires a make-up man, he is obviously concerned with the effect his message will have on the voting public. In short, the assumption that communications can and do have effects underlies almost all communication behavior. Indeed, most communications are produced with the intent of structuring a situation for someone else, of influencing him to act, or believe, or feel in a certain way.

On the other hand, millions have been spent on advertising campaigns which have led to no discernible change in the behavior of consumers; thousands of words have been exchanged by diplomats around peace tables, yet wars go on and on; and in spite of all the conversation implied in courtship, marriage, and years of living together, practically every husband or wife on earth has at one time or another "failed to communicate" with his or her spouse. Are we then to assume that only some communications have effects, or that communications are effective only some of the time? Is there any way to predict which communications will lead to the desired results, or when a message will be effective?

Perhaps even more to the point, we might ask what we mean by the "effects" of communication. If we speak to a friend, or send a business letter, or write a newspaper story, what is it that we expect to happen? Indeed, what are the consequences

of the very fact that we are capable of speaking to a friend, sending a letter, or writing a newspaper story?

In the pages that follow we attempt to examine what is meant by the effects of *communication*—the process—and by the effects of *communications*—specific messages produced with some intent on the part of the communicator. For the most part, we will look at one half of the communication dyad, concentrating on how a person interprets and responds to communications, assuming that the message has gotten through, that it has not been ignored, or avoided, or overlooked.

We will look first at the consequences of man's unique ability to engage in social communication. Next we will turn to more specific results of particular communications. Finally, we shall briefly examine the nature of mass communication effects.

Consequences of the Communication Process

Information and the environment. In the opening chapter of this book, Wilbur Schramm defines information as any content which reduces uncertainty or the number of possible alternatives in a situation. Another way of saying this is that information is any content that helps one *structure* or *organize* those aspects of the environment which are relevant to a situation in which he must act. For example, suppose you are at point *A* and wish to go to some distant point *B*, but that you have no idea where point *B* is located. This is a highly unstructured situation. There could be a vast number of alternative roads you might take, roads leading to all points of the compass, no one of which seems any more certain than any other to lead you to your destination. To the extent that information which will structure this situation is available, you can reduce your uncertainty by reducing the number of alternative roads likely to lead to point *B*. Simply the information that *B* is in a southerly direction from *A* would enable you to eliminate many of the roads you might have chosen to follow. As you add other pieces of information—say that point *B* is near some mountains—you can probably further reduce the number of likely alternative roads. In other words, each new piece of information enables

you to formulate a clearer picture of the best way to get from point *A* to point *B*, to build a kind of map. Indeed, the most useful information you could get would be that contained in a map showing the various routes leading from *A* to *B*. Such a map would completely structure the spatial aspects of this situation, reducing uncertainty about alternative routes to almost zero. (However, some uncertainty could still exist if you were also interested in taking the most scenic route, or the best-paved road, or the highway with the most gasoline stations. Depending on the road map, other information might be needed to structure the environment on dimensions such as these.)

Our example of how information provides structure to the environment need not be limited to humans or map-making. As Kenneth Boulding has pointed out, in order to function successfully all living systems, whether one-celled organisms or human beings, structure or form an "image" of aspects of their environment which are relevant to whatever goals they might pursue, regardless of how we define goal (e.g., survival, freedom from tension, money, happiness).¹ Were it not for the ability to use information to organize the environment, it would be difficult to conceive of anything but random behavior on the part of organisms. Thus, for example, bacteria in a Petri dish must organize their environment, the culture medium, at least into nutrient and nonnutrient; plants must structure their environment in order to "decide" where to send out roots in search of water and which way to orient to take best advantage of light sources; wild animals must organize their environment so that more probable sources of water or locations of food are discriminable from those which are less probable; the businessman must form some idea or image of which activities are likely to lead to profit and which to loss in order to pursue his goals successfully. Clearly there are differences among these organisms in the nature of the environments which are relevant to each (e.g., the bacteria's culture medium vs. the wild animal's forest), in the nature of the informational signs each interprets

¹ Kenneth E. Boulding, *The Image: Knowledge in Life and Society* (Ann Arbor: University of Michigan Press, 1961). This chapter owes a good deal to ideas stimulated by Boulding's book.

(e.g., the plant interprets radiation from the sun while the businessman reads the *Wall Street Journal*), and in the nature of the specific goals each pursues (nutrients to assimilate, energy for photosynthesis, a prey to be stalked, a product that will sell). Nevertheless, it is also clear that the general result of such information processing is common to all. Interpretation of information enables living systems to structure, or organize, or form an image of, or "know" their environments so that some alternatives (e.g., routes, behaviors, choices) seem more likely than others to facilitate the pursuit of goals within those environments.²

We have noted examples of how living systems organize particular aspects of their environment. Clearly, however, organisms structure the environment on numerous dimensions. For example, a college student may have an image of the layout of his campus, of the best way to get good grades, of how to interact with friends, of how to drive a car, of his parents' expectations of him, of which political party he favors, and so forth. For that student, all the images of all the various dimensions of his environment comprise a general picture of the world in which he operates—his subjective reality, so to speak. Here we are ignoring the metaphysical question of the nature of an absolute reality in favor of a more practicable approach. That is, for any given organism, reality is conceived as consisting of the world it "knows." What Schramm calls the frame of reference, that fund of stored, usable experience which the organism has processed and organized, is the reality to which it responds. It follows that an organism's *potential* reality is circumscribed by those aspects of the environment about which it may process information which, in turn, are a function of the availability of information to process and the kinds of information the organism is capable of processing.

Insofar as there is any compelling evidence, it appears that

² For convenience, we will adopt Kenneth Boulding's use of the term "image." We do not use the term in any exclusively pictorial sense. "Image" here refers to all those dimensions which contribute to the way an organism "knows" its environment—the facts, beliefs, values, expectations, emotions, and so forth, which both stem from and contribute to the processing of information.

most living systems interpret information about the environment primarily from what George Herbert Mead called "natural signs."³ Briefly, such signs are simply indicators of a referent which are "naturally" related to that referent. For example, smoke is a sign of fire, the growl of a dog over a bone a sign of danger, the dance of the bees studied by von Frisch a sign of the location of pollen-bearing flowers.⁴ In each case the sign is directly related to its referent; the sign and the referent usually, if not always, occur together so that either through learning or through innate sets to respond the sign comes to stand for or "means" the referent. Hence, for any given organism a sign usually carries one meaning which is specific to the situation in which it occurs.

Several scholars have defined the meaning of an informational sign as the response it elicits in an organism, regardless of whether the response is overt or covert, cognitive or emotional, connotative or denotative, or any combination of these.⁵ For example, having experienced fire, possibly having been burned by it, seeing its destructive power, noting its color, heat, odor, that it gives off smoke, and so forth, at some later time simply seeing smoke (or smelling something burning, or experiencing intense heat) will call up stored memories of the earlier experience, memories of the earlier responses. Although responses to any of these signs will not be identical to responses to fire itself, the sign acts as a code capable of calling up memories and responses highly similar to those elicited by the original referent—thus giving the sign meaning.

Given the preceding definitions of natural signs and of meaning, most organisms are limited in their communicative capabilities. Earlier Schramm noted that while a dog may growl to indicate his willingness to defend a particular bone in a particular situation, he cannot write a history of bones, nor

³ George Herbert Mead, *Mind, Self, and Society* (Chicago: University of Chicago Press, 1934).

⁴ Karl von Frisch, "Dialectics in the Language of Bees," *Scientific American* 207, no. 2 (1962): 78-87.

⁵ See, for example, Melvin L. DeFleur, *Theories of Mass Communication*, 2nd ed. (New York: David McKay, 1970); Boulding, *The Image*; Wilbur Schramm, "The Nature of Communication between Humans," in this volume.

can he discourse upon the principles of gnawing. He can only produce a sign which carries information in the context in which it was emitted. Moreover, even with two animals within the same context, there is no reason to assume that the growl carries the same meaning for the dog emitting it as for the dog interpreting it. They do not *share* the meaning of the sign. For the dog protecting the bone, the growl may raise feelings of fighting and winning; whereas in the interpreting animal the growl may arouse feelings of fighting and losing, or of fleeing, or of winning. Although the two animals' responses to the sign may be coordinated (e.g., one dog growls and the other flees), there need be no assumption that the meaning of the sign is similar for each, that one animal has an image or expectation of what the sign means to the other.⁶

The implication of all this is that the reality structured by most organisms is closely tied to direct experience with what humans would call the objective or physical environment. Most sign-referent relationships are established because the two naturally co-occur in that environment (e.g., smoke and fire). In addition, unless its response to a sign is innate (as may be the case with von Frisch's bees), an organism must *experience* the co-occurrence of sign and referent in order for a signifiatory relationship to be established. One organism cannot *share* the meaning of either a sign or a referent with another. Hence, reality for most organisms is structured out of direct interaction with tangible, physical aspects of their environment.

Communication and human "reality." Man is like other living systems in that he, too, structures reality out of information about the environment in which he functions. Like the one-celled organism and the four-legged animal, man interprets natural signs which carry such information as food or not-food, danger or safety—information which enables him to organize those dimensions of the world that a physical scientist might measure. However, human reality includes much more than just aspects of the immediate, physical environment. For example, Franklin Fearing wrote of man's "geographic stimulus

⁶ A clear, concise discussion of shared meaning versus coordinated responses is provided by DeFleur, *Theories of Mass Communication*, pp. 78–86.

field," which refers to direct, physical reality, and of his "behavioral stimulus field," which includes such factors as human needs, meanings, values, beliefs, and so forth; W. Phillips Davison describes the environment men experience as containing not only physical features, but also social, expected, and imagined features; Kenneth Boulding lists ten dimensions comprising man's image of the world, only some of which pertain to the "objective" environment.⁷

Regardless of how we subdivide and label its various aspects, it is clear that man creates a reality which extends well beyond the objective environment. His world contains abstract concepts such as justice, morality, and love. It spans continents, oceans, cultures; it recognizes roles, norms, and expectations; it extends backward into history and forward into the future; it touches on gods and angels, devils and furies. In short, human reality contains many features which an individual never directly experiences, many dimensions for which no tangible referents exist. Such a reality cannot possibly be structured completely out of the information contained in natural signs. Indeed, one of the more remarkable characteristics of human reality is the large proportion of information concerning it that can be passed on *only* by other persons, whether in a face-to-face exchange or through the pages of a book or the channels of a television set. In other words, much of human reality is structured not from interpretation of informational signs which occur naturally in the environment, but from interpretation of informational signs which men create and through which they exchange information—from human communication.

Basic to man's reality, then, is his ability to produce and use signs which are not limited to a specific situation, which are capable of conveying meaning across time and space, which do not depend for significance on direct experience of the co-occurrence of sign and referent, and which have meaning that is shared among men. These are the signs which Mead called *significant symbols*. DeFleur cites two fundamental characteristics

⁷ Franklin Fearing, "Human Communication," *Audio-Visual Communication Review* 10 (1962): 78-108; W. Phillips Davison, "On the Effects of Communication," *Public Opinion Quarterly* 23 (1959): 343-60; Boulding, *The Image*.

of such symbols: the association between the symbol and its referent is arbitrary; the meaning of the symbol is based on convention, on agreement among its users that a given sign will stand for a given referent. It makes no difference what set of letters, or marks, or sound elements we attach to a referent as long as those using the symbol *agree* that whatever we choose will stand for the referent. If all English-speaking persons agreed, we could label the referent house with the symbol "house," or "car," or "apple," or anything else. We need only think of the development and spread of the Morse Code or recall the role of "Newspeak" in George Orwell's *1984* for examples of symbol sets which are manifestly both arbitrary and based on convention.⁸

Such agreement, of course, is usually implicit. When we learn to speak a language or become a member of some cultural or subcultural group, we implicitly accept and share the conventions on which that language or culture is based, conventions which give meaning to the symbols we use. This is not to say that every user of a symbol set such as the English language will have precisely the same meaning for the same symbol. Schramm's earlier discussion of the "shared frame of reference" indicates that a symbol's meaning is shared to the extent that the experiences of the users of the symbol are similar. The word (symbol) "dog" may very well call up different responses in the Park Avenue matron who thinks of dogs in terms of French poodles than in the hunter who has experienced primarily retrievers or the veterinarian who encounters many dogs. Nevertheless, for most purposes enough of the meaning of "dog" is shared to enable an information exchange about dogs. Of course, as the need for precision increases, explicit agreement on the meaning of a symbol becomes more important. Thus philosophers, scientists, and occasionally even politicians often "define their terms" before engaging in a discussion or debate.

Because significant symbols are arbitrary and derive their communicative significance from shared conventions, they enable man to create and structure a reality far more subtle and

⁸ Mead, *Mind, Self, and Society*; DeFleur, *Theories of Mass Communication*.

complex than would be possible were he limited to the information contained in natural signs. Moreover, they enable man to communicate about that reality with others. Symbolic communication allows one to place objects in contexts, to draw the attention of others to what concerns him, to convey information across time and space, to express emotionally toned attitudes toward objects, actions, or situations, to enable participation in each other's attitudes and motives, to understand each other's intents and meanings, to generalize referents by placing them in broad categories. The symbol enables us not only to communicate about relationships among objects, but about relationships among abstractions, about relationships among relationships themselves, and about relationships that *might* exist in the future. And perhaps most important, symbols enable men to share experiences, whether the experience is an event in someone's life, a feeling, or an idea, and through such sharing to manipulate the meaning of experience—to manipulate reality itself.

Discussing human communication, Melvin DeFleur writes:

It is no exaggeration to say that the human communicative act, proceeding on the basis of the significant symbol, is a prerequisite ability without which it would not be possible for man to have developed his societies and cultures to the elaborate degree that he has. In fact, it is not possible to imagine any form of human society that could exist without this facility. The communicative act is the means by which a group's norms are expressed, by means of which social control is exerted, roles are allocated, coordination of effort is achieved, expectations are made manifest, and the entire social process is carried on. Without such exchanges of influence human society would simply collapse.

It is equally true that the involvement of the individual in the community of language is the key to his psychological nature. Without learning to use symbols and their associated internal meanings, he would be unable to manipulate meanings, form beliefs about himself, ponder a problem, have human emotions, grasp a principle, plan ahead, learn in retrospect from the lessons of the past, and perform other human acts.⁹

⁹ DeFleur, *Theories of Mass Communication*, p. 90.

In short, communication via the significant symbol provides men with the information necessary to define both their world and themselves within that world. The most basic and all-encompassing consequence of human communication, then, is the creation of the human condition itself.

Effects of Specific Communications

The preceding pages discuss the general consequences of the *process* of human communication, looking at how man's ability to share information with others of his kind results in the creation of a uniquely human reality. Most questions about communication effects, however, inquire about the specific results of specific communications or kinds of communications. We ask whether a professor's lecture facilitates learning, whether a sales message encourages buying, whether a warning sign engenders caution, a comedian's joke laughter, a candidate's speech a vote, a news program a better informed public.

The cause and effect model. In a loose sense, some kind of stimulus-response or cause-effect model underlies most such questions about communication effects. That is, whether we give a lecture, "pitch" a product, tell a joke, or report the news, we expect the message to act as a stimulus which incurs some kind of response in the receiver. This does not mean that a person's response to a communication can be predicted from the message itself, however. As Schramm notes, the past several decades have witnessed a great deal of modification and elaboration of the simple S-R model of communication. A variety of different variables—personality, social relationships, social and cultural background, past experience, needs, motives, and so forth—have been postulated to intervene between the message and a person's response to it. Any of these variables may influence how a receiver interprets a message, and effects derive not from the message itself but from how that message is interpreted. Nevertheless, to the extent that a communication activates the interpretation process, some form of the stimulus-response assumption—that a communication serves to stimulate, or cue, or activate, or in some way cause a response, or behav-

ior, or effect—is implicit in most of the various approaches to communication effects.

Usually, then, a communication is judged to have an effect to the extent that it is followed by an observable response on the part of the receiver which appears to derive from the message. We study the effects of communications by looking for changes in the behavior of people after they have been exposed to messages or at differences in the behavior of people, some of whom have been exposed to a message and some of whom have not. We observe whether the audience begins to laugh after the comedian tells his joke, whether students who attended the professor's lecture do better on an examination than students who were absent, whether the fund-raising speech results in an increase or a decrease in the number of contributions, whether when we ask for the salt our tablemate passes it to us or continues to read the paper. Indeed, most of us are probably aware of instances where people go so far as to reverse the process, observing some behavior and inferring that a certain kind of communication must have taken place ("Stop that, John! You've been watching French movies again!"). Regardless of what behavior we choose to observe, if it follows the message, and if it seems conceptually related to what we perceive to be the content and/or intent of the message, then we are likely to infer that the communication has been effective. This has been the basic paradigm of most studies of communication effects.

There are, however, several difficulties with this approach to communication effects. First, we are limited to inferring that a message has had an influence only when we are able to observe a *change* or *difference* in the response chosen as the indicator of effect.¹⁰ Thus, if a person who has always voted for Democratic candidates is by some means limited to reading and hearing only Republican campaign literature and is then observed to vote a GOP ticket, we are relatively safe in assuming that the pro-Republican messages have had an effect. On the other hand, if a perennial Democrat is exposed to Democratic cam-

¹⁰ We include here not only observable motor behaviors, but also responses on a variety of paper-and-pencil measures (e.g., learning tests, attitude scales, and so forth).

campaign literature and continues to vote for Democratic candidates, we cannot determine whether he was influenced by the messages he received or whether he would have voted Democratic anyway. The absence of an *observed* change in his vote provides no basis on which to decide whether the communications did or did not have an effect.

It is possible, however, had we chosen some other measure of communication effect, that we might have found our captive Democrat was wavering in his party loyalty and that the messages served to bring him back into the fold. Our second point, then, is that we are at the mercy of the indicators of effect we choose to observe. If we decide to judge the effectiveness of campaign messages only on the basis of voting behavior, we may fail to note a variety of other effects (e.g., campaign messages may increase contributions to the party, encourage people to engage in precinct work, strengthen party loyalties, etc.) which could follow from the message even though voting behavior remained constant. Obviously one way of overcoming this difficulty is to use multiple indicators of effect. However, there is a limit to the number of different responses we can observe.

In addition, we may fail to consider possibly significant responses which might follow from a communication simply because we don't expect them. Since we generally produce messages with a specific goal in mind, there is a tendency to look for effects which relate to the communicator's intent. For example, there is evidence that the pro-social, justified violence manifested in many television programs in order to demonstrate that "crime doesn't pay" (e.g., the sheriff shoots the villain, the "good guy" beats up the "bad guy") may actually serve to increase the probability of violent behavior on the part of young children.¹¹ The unexpected result of such communica-

¹¹ See, for example, various sections of Robert K. Baker and Sandra J. Ball, eds., *Violence and the Media*, a staff report to the National Commission on the Causes and Prevention of Violence (Washington: U.S. Government Printing Office, 1969); Leonard Berkowitz and E. Rawlings, "Effects of Film Violence on Inhibitions against Subsequent Aggression," *Journal of Abnormal and Social Psychology* 66 (1963): 405-12; R. S. Albert, "The Role of the Mass Media and the

tions may be to show children how to justify their own violent behavior, just the opposite of the message's intent. Similarly, Upton Sinclair wrote *The Jungle* as an exposé of the horrendous working conditions existing in the meat-packing industry, intending to arouse public sentiment which would lead to legislation protecting the workers. The response engendered by the book, however, was an outcry against food packing standards and, eventually, pure food legislation. Had Sinclair attempted to evaluate the effectiveness of his work solely on the basis of indicators related to its intent, he might well have concluded the book was a failure. Of course, from his point of view it may well have been a failure; but history tells us that on at least one dimension *The Jungle* was a very effective communication. In other words, while observation of any set of indicators may enable us to evaluate the effects of a communication *on those indicators*, to the extent that we are bound to overlook a variety of other possible effects they do not enable us to make statements about how a communication affects a receiver in any total sense.

Messages and the image. The preceding points indicate a third major problem with communication effects as we generally measure them. Regardless of which responses or behaviors we choose to measure, most *observable* indicators of communication effects are, at minimum, one step removed from the fundamental locus of effect. Communications do not *directly* mediate overt behavior. Rather, they tend to affect the way a receiver organizes his image of the environment, and this organization influences the way he behaves. We have already seen that individuals interpret information in order to organize or structure their world, thereby facilitating interaction with the environment. Hence we assume that the way a person behaves, the attitudes and values he expresses, and the knowledge he manifests are all mediated by, and thus reflections of, the image of the environment he has structured. If, for example, a person has organized his environment such that he associates the Dem-

Effects of Aggressive Film Content upon Children's Aggressive Responses and Identification Choices." *Genetic Psychology Monographs* 55 (1957): 221-85.

ocratic party with people and policies he favors, and if he associates casting a ballot with being a good citizen, and if he values good citizenship, then we would generally expect this image to mediate his overt behavior—a vote for the Democrats. To change that behavior, then, we must somehow affect the way he organizes his world by providing him with new or different information. In order to do this we confront him with communications aimed at causing a restructuring or redefinition of his image. We can produce messages which attempt to dissociate favored people and policies from the Democratic party, or to devalue those people and policies, or to denigrate the value of voting, or to demonstrate that the Republicans are sure to win and that there is greater value in voting for a winner than for a policy, and so on. If the receiver accepts these new associations and incorporates them into his organization of reality, we might expect him to change his vote to the Republican party. Most communicators at least implicitly recognize that the way to encourage a desired response is to influence such redefinition of the receiver's image through messages.

We can conceive of messages as providing *prestructured* information—information organized such that certain relationships and associations are salient (and often such that others are not) in the hope that a receiver's interpretation of those prestructurings will influence his image of the environment, hence his behavior. Professors attempt to facilitate understanding by relating complex theoretical concepts to concrete examples familiar to their students; a husband seeks an expression of love, or a hot meal, or a night out with the boys, by tying his request to a compliment on his wife's new dress; a reporter tries to inform his audience by relating the latest piece of legislation to its supporters and opponents, its costs and benefits, its place in the larger scheme of things; advertisements show bikini-clad beauties caressing the latest in deodorants with the hope that men will recall this association the next time they stroll through a drugstore. In each instance, communications may be seen as attempts by communicators to structure aspects of the environment *for* receivers by creating certain associations. Boulding writes that "messages consist of information in

the sense that they are structured experiences." And he goes on to say that "the meaning of a message is the change which it produces in the image."¹² Hence we can view the production of messages as attempts to influence the way a receiver structures his world.

To summarize, the *primary* effects of communications are not directly observable. Primary effects occur at the level of the image a receiver has organized—inside the "black box," so to speak. While we can make inferences about communication effects based on the receiver's behavior, the true effect of a message may be more or less subtle, far-reaching, and complex than any observable measures can indicate.

Types of effects on the image. Even though we cannot directly observe the effects of a particular communication on a receiver's image of his world, we can nevertheless consider the types of effect which may take place. Assuming that a message is not ignored or avoided, various dimensions of a receiver's image of the environment may be affected in one of two fundamental ways: they may be *redefined*, or they may be *maintained*. In other words, a message can be interpreted such that it either results in a change in some part of the image or such that it does not. This is not to say, however, that maintenance of the image is synonymous with "no effect." Quite the contrary. For purposes of interacting with the environment, information indicating that our structuring needs no redefinition is just as valuable as information indicating a need for change. We are continually checking to see whether or not the way we have organized reality is still valid.

To the extent that a receiver interprets a message as repeating information he has already organized, then, the effect is one of *maintenance* of that organization. If, for example, a teacher has organized an image of a student as one of the best pupils in his class, each time the teacher interprets a message from that student (exam, term paper, response to a question) as worth a high grade, his image is maintained. Such messages indicate that there is no need for restructuring, that his image of

¹² Boulding, *The Image*, p. 7.

this aspect of the environment is still valid. A large proportion of the communications we interpret daily serve this function. The smile and "hello" from our neighbor, a mother's instructions to "eat all your vegetables," the newspaper headline indicating the world is in a state of crisis—messages like these usually tell us that things are still the same. They tell us that we can plan our behavior according to the image we have previously structured.

Redefinition effects, on the other hand, occur whenever information is interpreted as being different from that which makes up the existing image, as incongruent with the organization a receiver has previously imposed upon his world. If a receiver interprets a message as indicating that some aspect of his view of reality is incomplete, or invalid, or ill-defined, then we assume that a redefinition of his image will take place. For example, should the above-mentioned teacher begin to interpret his "best" student's papers or examination answers as inadequate—as worth, say, only a D grade—he should somehow change or redefine his existing image. The nature of such redefinition will vary with the interpretation given to the message. Different kinds of messages and/or messages about different parts of the environment may give rise to different types and amounts of incongruity between dimensions of the receiver's image and the new information. Differences in incongruity should lead to different modes of change.

Kenneth Boulding lists three ways in which a message might engender redefinition of a receiver's image: through addition, through reorganization, and through clarification.¹³

First, the image may be added to. This occurs when a receiver interprets information about some aspect of the environment which he has not previously organized, or new information about a previously organized aspect of the environment which does not conflict with the existing organization. When we learn a new skill, or read about some part of the world with which we have never previously concerned ourselves, or obtain additional information about a subject which interests us, our

¹³ Ibid.

image of reality may simply be expanded. No fundamental change within existing structures need occur; the image is simply redefined through addition of new information.

Second, the structure of existing aspects of the image may be reorganized. This kind of redefinition can be expected when a message is interpreted as indicating either that some part of the environment has changed (e.g., we hear that a president has been assassinated; we receive a wedding announcement from our supposed fiancée) or that we have incorrectly organized some part of the environment (e.g., campaign literature convinces us that it is the Republicans, not the Democrats, who more frequently support organized labor). In either case, the effect on a receiver's image is one of reorganization, of creating new relationships, new meanings. Of course, depending on the aspect of the environment with which the message deals and the importance of that part of the environment to the receiver, the ensuing reorganization may be more or less radical. Messages may engender restructuring of the image as minor as a change in preference for one brand of toothpaste over another, or as major as a religious conversion.

Third, a message may act to clarify some dimension of the image. That is, we may have structured certain aspects of the environment with more or less certainty, more or less clarity. Given lack of clarity about some part of the environment, we can conceive of communications which neither add anything new to the image nor result in reorganization of it, but which nevertheless engender a change in that they reduce our uncertainty by giving some aspect of the image higher definition. For example, when we read over a set of directions which refresh our memory of how to perform some task, the effect is often one of clarification. In a sense, clarification is similar to the maintenance effect discussed above. Both result from messages interpreted as repeating information which has already been organized. The difference lies in the amount of certainty which characterizes relevant dimensions of the image at the time the message is received, a difference more of degree than of kind.

Determinants of effects. As Schramm points out in his discussion of the communication process, whether a given message is

interpreted such that it maintains the image or results in one of the types of redefinition depends on what the receiver brings to the communication situation—on his previous organization of the environment. We have already noted that new information, whether from direct experience or from socially mediated messages, is interpreted in terms of the image of reality one has already organized. In a sense, the "image," which is simply a metaphor representing the totality of all the information about the world any individual has processed, organized, and stored, may be conceived as a kind of template or standard against which new information is compared in order to give it meaning. This template includes the frame of reference and the needs, values, beliefs, and expectations which influence what a receiver takes from a communication situation. And it is a dynamic template in that each new piece of information processed has the potential to change the image and because, depending on the situation, various parts of the image may exert more or less impact on an interpretation at different times.

Illustrations of how differences in the way people have structured their world lead to differing interpretations of and responses to a communication are plentiful. Cooper and Jahoda found that a series of cartoons, which were viewed by unprejudiced people as ridiculing bigotry and anti-minority feelings (as the creator of the cartoons intended), were given entirely different interpretations by prejudiced receivers. Those who came to the experiment with an image of the world in which minority groups were stereotyped and denigrated tended to interpret the cartoons as making points entirely unrelated to prejudice, or to find the messages too difficult to understand ("I don't get the point"), or even to view them as supporting their existing prejudices.¹⁴ Similar differences are exemplified in the following responses to a *Time* story describing a violent confrontation between construction workers and peace demonstrators, letters which reveal not only differing interpretations of the story, but also different experiential bases underlying

¹⁴ E. Cooper and M. Jahoda, "The Evasion of Propaganda," *Journal of Psychology* 23 (1947): 15-25, and in this volume.

each correspondent's organization of his world. One reader wrote:

The recent display by New York hardhats with their Gesta-po-type invasion of a peace rally was disgusting! As a 28-year-old college student, ex-paratrooper and active participant in peace demonstrations, I was enraged at their actions.

It is actions like theirs that will lead to a violent revolution in this country.

But another reader responded with:

Congratulations to the New York construction workers, the best thing that's happened in this country for a long time. I would advise some of the academic community and some other persons of less than mediocre common sense to help maintain order and to encourage political action instead of demonstrations, mobs, arson and destruction. A lot of us working people, military people and law enforcement people are waiting for enough excuse to join the construction workers.¹⁵

Finally, most of us are probably aware that we ourselves are open to information dealing with some aspects of the environment but will tend to ignore or avoid or "misinterpret" messages dealing with other aspects. In each instance, such differences in interpretation of messages are heavily influenced by how the receiver has structured his world prior to receiving the message. In short, the nature of the information inherent in people's history of experience with the environment, regardless of whether that experience is direct or socially mediated, forms the basis on which each organizes his own image of reality—of the way things are and should be, of what is good and bad, of what is important and unimportant, of what will serve their needs and what will not, indeed, of what many of those needs are. To the extent that no two people ever encounter precisely the same experiences or process exactly the same communications, we can expect them to structure different images of reality, thus to interpret the same messages differently.

Let us look more closely at how the nature of an individual's

¹⁵ "Letters to the Editor," *Time*, June 15, 1970.

image mediates the effects of communications. Generally, by the time we reach adulthood we have organized a relatively stable image of reality, and we tend to process information such that it remains stable. That is, we are more open to messages maintaining the image than to those indicating a need for redefinition. Similarly, we are more apt to add to our organization of reality than to restructure it. In other words, the effects of communications on individuals seem to follow a kind of principle of least effort. Messages which repeat information we have already organized demand little effort of interpretation. We simply relate such information to existing parts of the image. Messages which deal with aspects of the environment we have not previously organized demand a bit more effort. To give them meaning we must establish new categories, new relationships. Messages which call the existing structure into question demand the most effort. In this case dimensions of the existing image must be reorganized; old associations and meanings must be done away with and new ones established in their place.

For example, if we tell a person who believes the world is flat that the world is flat, he should have little difficulty accepting our message. It agrees with the way he has already organized reality. If we tell him that, flat world or not, a new continent has been discovered to lie between where he stands and what he perceives as the edge of the world, he might experience more difficulty dealing with our message, but to the extent that he has never considered the possibility of there being another continent he can probably add this information to his image without too much effort. If, however, we attempt to convince him that the world is round, our message will probably meet with a great deal of resistance. For him to accept this information implies a need for reorganization of much of his view of reality. Indeed, depending on how closely related this aspect of his image is to other aspects, it could demand not only changes in the way he perceives the shape of the earth, but also changes in his image of religion, of science, of other people who believed the earth to be flat, and so forth. Clearly such reorganization demands a great deal of effort.

Given this tendency for people's interpretations of communi-

cations to follow the path of least resistance, we can make several generalizations about how and when communications will affect receivers.

First, we tend to be more open to messages which are consonant with our existing image, messages which appear to maintain or reinforce our beliefs and values. Communications which are not consonant tend to be resisted by avoiding or ignoring them, by counterarguing against and discrediting them, by attacking the credentials of their source, by "misinterpreting" or distorting them, and so on. Further, the more important to the receiver the aspect of the image to which the incongruent message pertains, the more resistant he will be. Thus Sherif and Hovland found the people tended to distort toward their own positions messages advocating positions slightly different from their own. Conversely, people interpreted messages advocating beliefs very dissimilar from their own as being even more incongruent than they actually were. Moreover, these assimilation and contrast effects became more marked as the importance of the issue to the receiver increased.¹⁶

Second, messages which are incongruent with the value dimensions of a receiver's image usually tend to engender more resistance than messages incongruent with cognitive dimensions. For example, a bigoted person will experience less difficulty with a message attacking one of his cognitions about a minority group (e.g., "They are not dirty; they bathe daily") than with a message attacking his general evaluation of that group (i.e., "They are not bad; they are good"). He can accept the former message by changing only a small part of his image while other cognitions about the group and his general evaluation of the group remain unaffected. To accept a message advocating reevaluation, however, implies change throughout this part of his image. If the communication convinces him that the group he had previously evaluated as "bad" is, in fact, "good," then he must somehow change many, if not all, other relevant

¹⁶ Muzafer Sherif and Carl I. Hovland, *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change* (New Haven: Yale University Press, 1961); see also C. Sherif, M. Sherif, and R. Nebergall, *Attitude and Attitude Change* (Philadelphia: Saunders, 1965).

aspects of the image. Obviously members of the group cannot be "good" and remain "dirty," "rude," and "lazy." In other words, the value dimension tends to rank among the more important aspects of a person's image in that it relates to almost all cognitions. Davison's discussion of communication effects is based on the proposition that a person's attitudinal structure is fundamental to how he responds to any communication, and Boulding writes that "the value scales of any individual or organization are perhaps the most important single element determining the effect of the messages it receives on its image of the world."¹⁷

Our third generalization is that to the extent we positively value fulfillment of our needs, messages which contain information which is useful, which indicates a way to get more benefit for less cost, which in some way facilitates the pursuit of goals, will be more easily accepted than messages which do not. We tend to be relatively open to information relevant to our needs. People who hate mice, people whose careers are devoted to the elimination of mice, and small cafe owners who face being closed by the board of health unless they get rid of the mice in the storeroom all are very likely to listen carefully to the man who builds a better mousetrap.

Fourth, since we process information in order to structure the social and physical environment, as changes in the environment are perceived we are concomitantly more open to incoming messages. Perception of changes in the environment implies some degree of uncertainty about the accuracy of our existing image of the world, thus uncertainty about how to behave in that world. Hence we seek new information in order to either validate or reorganize that image. When President John F. Kennedy was assassinated, almost the entire nation turned to the communication media, processing every available bit of information in an attempt to reorganize an environment which had been so tragically changed.¹⁸ Of course, communications

¹⁷ Davison, "On the Effects of Communication"; Boulding. *The Image*.

¹⁸ See various papers in B. S. Greenberg and E. B. Parker, eds., *The Kennedy Assassination and the American Public: Social Communication in Crisis* (Stanford: Stanford University Press, 1965).

about the event were interpreted in a variety of ways, depending on each receiver's pre-existing image. Nevertheless, messages were interpreted and images of reality were redefined. Similarly, when Orson Welles presented a Halloween program in the form of a radio newscast describing an invasion by ranks of horrifying monsters from Mars, at a time when many people were unsure about the state of the world, it had a tremendous effect on those whose image of reality seemed most marked by uncertainty.¹⁹

Finally, each of the preceding points is mediated by the nature of the total communication situation. A message which is interpreted as congruent with our organization of reality and which leads to maintenance effects in one situation may be seen as highly incongruent and lead to redefinition effects in another. As Schramm has already detailed, the source of a message, the channel and medium chosen to convey the message, elements such as others in the audience, the type of room, what we were doing before receiving a message and what we expect to do afterward, factors like these contain information which is processed along with information in the message per se. To the extent that such factors tend to cause different aspects of an individual's image to be more or less salient, to activate different needs, emphasize different values, recall different reference groups, roles, and expectations, they can exert a strong influence on how a message is interpreted and what effect it will have.

Several experiments serve to illustrate how various aspects of the total communication situation may affect interpretation of a message. Solomon Asch presented people with identical statements attributed to different authors and asked them to write a paragraph indicating what the statements meant. Different authors led to very different interpretations. For example, consider the following statement: "I hold it that a little rebellion, now and then, is a good thing, and is as necessary in the political world as storms are in the physical." When attributed to Thomas Jefferson, this statement was interpreted as implying a

¹⁹ Hadley Cantril, *The Invasion from Mars* (Princeton: Princeton University Press, 1947), and in this volume.

need for peaceful political agitation; when attributed to Lenin, it was taken to be a justification of the Russian Revolution. In addition, Lorge, whose experiment Asch was replicating, found that people were likely to agree with the statement when it was attributed to Jefferson and disagree with it when attributed to Lenin. It appears that simply differences in the perceived source of the message served to make different aspects of the image more salient in the interpretation process, leading to differences both in interpretation and in effect.²⁰ In a similar vein, Wilson and Shaffer found that when third-graders were offered a choice of learning about how fish swim by reading either a comic book, a textbook, or a typewritten page, the children overwhelmingly chose to read the textbook. When questioned about their choices, they explained that although they liked comics for entertainment, they associated them with fantasy, distortion of reality, and caprice. For authentic information, they placed their confidence in textbooks. Here, differing expectations about the proper functions of various communication channels affected responses to the message.²¹

The image, information, and observable behavior. Just as all the information inherent in a communication situation may potentially influence the effect of a message on a receiver's image of the world, so too may the information in any behavioral situation influence more observable responses to messages. While the largest proportion of our behavior appears to reflect the way we have structured the world, and while many of our observable responses to a message are, in fact, indicative of how a message has affected our image, instances when behavior appears to belie the image are not infrequent. We are probably all familiar with situations in which we have behaved in a manner very different from how certain dimensions of our image of the world indicated we should have behaved. Most of us have responded to a greeting from a friend with a smile and a "Just

²⁰ S. Asch, "The Doctrine of Suggestion, Prestige, and Imitation in Social Psychology," *Psychological Review* 55 (1948): 250-76; I. Lorge, "Prestige, Suggestion and Attitude," *Journal of Social Psychology* 7 (1936): 386-402.

²¹ R. C. Wilson and E. J. Shaffer, "Reading Comics to Learn," *Elementary School Journal* 66 (1965): 81-82.

fine! How are you?" on occasions when we couldn't have felt worse and perceived the world to be the bleakest of places. And it is not unheard of for a registered Democrat, who believes in all of the principles of his party, to vote for a Republican; for a lover of desserts to refuse a second piece of pie; for a sincerely religious person apparently to ignore the tenets of his faith.

Actually, given the complexity of the world a human must structure, and thus of his image of the world, such behavior is not too surprising. We continually process and respond to information from all parts of the environment, and the nature of this information influences which aspects of the image are more salient and exert more influence on our behavior at any given time. For example, the greeting from our friend provides us not only with an opportunity to obtain company for our misery, but, depending on other elements in the situation, may also bring to mind a certain set of social responsibilities which dictate that one does not burden a friend with woes, or a need to maintain the impression of being an eternal optimist, or the feeling from his tone of voice that his greeting was simply an observance of convention, hence the response need be nothing more. Thus messages which we agree with and incorporate into our image at one time may have no observable effect on our behavior at a specific later moment. This is not to say, however, that the message had no effect, for at some third time, in a still different situation, the structure it provided our environment may again function to influence our overt acts.

One of the more dramatic instances of this apparent incongruence between the way people have structured their world and the way they behave is reported by R. T. LaPiere. LaPiere traveled throughout the United States with a young Chinese couple, stopping at 66 hotels, auto camps, and tourist homes, and dining in 184 restaurants and cafes. During this trip, they were refused service only once. Six months later, LaPiere sent questionnaires to all of the establishments visited, asking if they would accept Chinese as guests. Of the 50 percent who replied, over 90 percent said "No."²²

²² R. T. LaPiere. "Attitudes vs. Actions." *Social Forces* 14 (1934): 230-37.

Now, unless we are willing to believe that a fantastic proportion of people changed their image of the Chinese during the time between the trip and the questionnaire, it seems that information inherent in the situation at time one (e.g., I am face-to-face with the Chinese couple) caused one part of the proprietors' image to exert more influence (e.g., to refuse service in a face-to-face situation could cause an ugly scene, which is something I want to avoid), while information inherent in the situation at time two (e.g., this questionnaire is anonymous, and to be filled out in private; etc.) caused or allowed other parts of the image to exert more influence (e.g., I can maintain the white, Anglo-Saxon "purity" of my establishment at little risk). In other words, elements inherent in the face-to-face encounter appear to have influenced behavior in accord with those parts of the image which indicate that avoidance of ugly scenes is important, while elements of the private situation made expression of their prejudices more satisfying. Given the nature of our society and culture we are reasonably justified in assuming that, at some point prior to the time LaPiere and the Chinese couple made their tour, most of these proprietors had received and accepted some messages indicating that people should avoid scenes, and others indicating that minority-group members were to be shunned. To the extent that this assumption is valid, we can say that *both* sets of messages were effective. That is, such messages did influence how the proprietors organized their world and, depending on the nature of the information inherent in each situation, they did influence overt responses.

The important point is that no message, no piece of information, ever exerts influence in a vacuum. When we conceive of communication effects at some observable, behavioral level, we must keep in mind that any given communication *contributes* to effects depending on how it interacts with other information in the situation and with what the receiver brings to the message. It is seldom, if ever, the sole cause of any effect.

Mass Communication Effects

One of the more striking features of contemporary society is the ubiquitous presence of the mass communication media. Thousands of people and billions of dollars are devoted to collecting, structuring, reproducing, and transmitting a seemingly endless barrage of messages at those millions of individuals who comprise the mass audience. In the United States, for example, circulation of daily newspapers exceeds one per household; there are over four radios for every household in the country; ownership of the newest mass medium, television, passed one per household in 1960, and the figure is still rising.²³ Indeed, one of the more obvious and indisputable effects of mass communications is simply that they take a great deal of our time. Various studies of media use patterns in the United States have shown, for example, that by the end of the grade-school years children average over three hours per day of television viewing, a figure which, with minor increases and decreases at various age levels, represents a good estimate of the amount of time adults spend with the television set; that use of all mass media combined accounts for over 50 percent of the leisure time of adults; that by the time he graduates from high school a typical teenager has spent more time watching television than in the classroom.²⁴

But what about other possible effects? Given that the simple fact of the mass media's existence results in our devoting a great deal of time (and money) to them, are we in any way influenced by what they say or how they say it? Is there anything

²³ DeFleur, *Theories of Mass Communication*; also see Jack Lyle, "Contemporary Functions of the Mass Media," in Baker and Ball, *Violence and the Media*, pp. 187-216.

²⁴ See for example, Wilbur Schramm, "Mass Communication in the Human Life Cycle," in *Mélanges Roger Clausse* (Brussels: Editions de l'Institut de Sociologie, 1971). For a detailed review of the media use patterns of children, see Donald F. Roberts, "Communication and Children: A Developmental Approach," in Wilbur Schramm, Ithiel de Sola Pool, et al., eds., *Handbook of Communication* (Chicago: Rand McNally, in press).

in the nature of mass communications which might lead us to expect a person to be affected differently by them than he would be by interpersonal communications? Does the fact that the media are capable of quickly transmitting vast amounts of information across large distances to millions of people have implications for how society is organized? Does it have implications for how any given individual structures his image of reality? Does simply the awareness that the mass media are capable of bringing any act, event, or idea into the public eye affect the behavior of individuals, groups, or nations?

As the preceding questions indicate, the effects of mass communication may be approached from many perspectives. We can ask about effects on individuals, on societies, on cultures. We can look for short-term effects or long-term effects. We may be concerned about the influence of the mass *media* or of mass *communication*. Or we may continue the distinction made in the opening pages of this chapter and think in terms of the effect of mass *communication* or of the effects of mass *communications*.

Many of the early fears that the broad reach of the mass media would place entire populations at the mercy of a small set of propagandists have proven to be largely unfounded, at least in terms of *immediate* effects. Schramm's early description of the process of communication as an act of "sharing," Raymond Bauer's concept of the "obstinate audience," Carl Hovland's classic explanation of why persuasive techniques so successful in the laboratory appeared to fail when applied to mass communications in the field—all these helped us to realize that mass communications were not omnipotent in terms of controlling the minds and behavior of members of the mass audience.²⁵ In 1960 Joseph Klapper reviewed much of the existing research on the effects of mass communication and concluded that rather than radical reorganization of the way an individual

²⁵ Wilbur Schramm, "How Communication Works," in Wilbur Schramm, ed., *The Process and Effects of Mass Communication* (Urbana: University of Illinois Press, 1954), pp. 3-26; Raymond A. Bauer, "The Obstinate Audience," *American Psychologist* 19 (1964): 319-28; Carl I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," *American Psychologist* 14 (1959): 8-17.

organizes his image of the world, the most likely effect of mass communication is maintenance of the status quo.²⁶

That mass communications are not the most effective means for influencing immediate change of *established* beliefs, opinions, attitudes, or values is not too surprising. Because of the nature of the media and the heterogeneity of the mass audience, the mass media cannot tailor their messages to meet the needs and beliefs of individual receivers. They do not have available to them the necessary, immediate feedback which might indicate when to repeat or clarify a point, when to reinforce a response, when to concentrate on an apparent weakening of resolve. The mass communication situation usually does not activate the social norms inherent in interpersonal situations, norms which constrain one to attend, to manifest interest, to consider politely the other's point of view, any or all of which can increase the impact of a persuasive message. Moreover, mass communications often reach an audience that is on its guard, that expects the sponsor, or the politician, or the commentator to attempt to change its mind. It is an audience which is ready to resist. And finally, in societies where the media are free of any sort of central control, many of the messages which attempt to persuade receivers of one specific point of view must compete with messages advocating just the opposite. The Democratic candidate is usually rebutted by the Republican, who, in turn, is attacked by the Democrat. The commercial claiming that Brand X is the best widget in the world is usually countered by Brand Y's contention that *it* is the best widget in the world. In short, the nature of the mass media, the mass audience, and the mass communication situation tends to minimize the probability that mass-mediated messages will cause a receiver to reorganize radically *established* beliefs, opinions, or values.

On the other hand, mass communications may have a great deal to do with how we structure the world over the long term, and with how we organize *new* aspects of the image, form new opinions and beliefs. Early in this paper we noted that human

²⁶ Joseph T. Klapper, *The Effects of Mass Communication* (Glencoe, Ill.: The Free Press, 1960).

reality is unique in the large proportion of information concerning it that can be passed on only by other persons. We can go a step further and say that twentieth-century man is unique in that he derives so much of his image of reality from mass-mediated information. Although most of us will never set foot on the moon, participate in a Middle Eastern war, or experience a heart transplant, because of information the mass media have made available, each of these events probably contributes to aspects of our image of the environment to which we respond.

Clearly there is a good deal of truth in Marshall McLuhan's conception of the mass media as "extensions" of man's senses.²⁷ Because of the media, the small-town grocer can respond not only to his customers' expressed desires or his immediate competitors' prices, but he can also plan his behavior on the basis of knowledge about a drought in Kansas or a shipping strike on the East coast. The Midwestern coed's image of fashion is based not only on what she actually sees her classmates wearing or what she finds in the local stores, but also on what the media tell her about high-fashion salons in Paris, boutiques in London, and California casual wear. Alberta Siegel cites an excellent example of how a newspaper reporter covering the 1968 presidential elections in rural Iowa found farmers to be less preoccupied with political issues immediately affecting their local communities and livelihoods than with the issues filling the mass media:

Other issues have become so overriding as to obscure the farmer's problems, even in his own mind. Through some miracle of modern communication and repetition, the farmer lives in rural solitude and dwells upon crime-filled city streets, fiery demonstrations, bloody riots, bearded campus protestors, the frustrating war in Vietnam. And all indications are that those are the images that will fill the farmer's mind when he walks into the voting booth on November 5.²⁸

²⁷ Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964).

²⁸ Douglas E. Kneeland, "Pocketbook Issues Secondary in Rural Iowa," *New York Times*, Oct. 18, 1968, p. 34, cited in Alberta Siegel, "The Effects of Media Violence on Social Learning," in Baker and Ball, *Violence and the Media*, p. 268.

In other words, because the media can and do make available large amounts of information about the world which we can never directly experience, mass communications are well suited to affect additions to our image of reality and to influence strongly how we structure parts of the environment about which we have little opportunity to acquire firsthand knowledge.

One of the major consequences of the mass media's ability to transmit messages quickly across great distances and to supply us with otherwise unobtainable information is that we have come to *expect* them to maintain a constant surveillance of distant parts of the environment and to provide us with information about the broader world. And we rely on such information—a reliance which has several important implications both for individuals and for society.

First, the *news* media have tremendous potential for directing our attention. We tend to assume that the events they cover are important, if only because they are reported in the media. That is, our awareness that mass-mediated messages reach millions of people and that they are produced by large organizations whose avowed purpose is to ferret out and report significant events in the environment influences us to view much of what is reported as important—as worthy of our attention. Lazarsfeld and Merton write of the mass media's status-conferral function, contending that simply recognition by the media of some person or group singles them out from the "large, anonymous masses" and bestows prestige and authority upon them. They write: "The audiences of mass media apparently subscribe to the circular belief: 'If you really matter, you will be at the focus of mass attention and, if you *are* at the focus of mass attention, then surely you must really matter.'" ²⁹ It is also worth noting here that the media's ability to confer status often tends to affect the behavior of people who seek status. Stories of how the young movie starlet or the aspiring politician attempt to maneuver themselves within range of the camera or onto the

²⁹ Paul F. Lazarsfeld and Robert K. Merton, "Mass Communication. Popular Taste and Organized Social Action," in Lyman Bryson, ed., *The Communication of Ideas* (New York: Institute for Religious and Social Studies, 1948), pp. 95-118.

front page of the newspaper are legion, and Joe McGinnis has provided us with an excellent description of how, during the 1968 presidential campaign, Richard Nixon's advisers went to great lengths to map the Republican candidate's every move with an eye to the television camera.³⁰

Nor do we need to limit this attention-directing, status-conferring effect of the media to individuals, groups, or institutions. Issues and events also assume importance to the extent that they receive media coverage. If a Senate bill, or a social action program, or the publication of a new book receives attention from the media, we are likely to ascribe importance to the event. Even though the Iowa farmer described earlier is not *directly* affected by distant campus demonstrations or crime-filled city streets, the mass communication media, simply because they devote a great deal of time and space to such events, encourage their incorporation as important parts of his image of the environment. And, as with attention-seeking individuals, we also find attention-seeking events. Daniel Boorstin provides us with a detailed description of the birth and growth of pseudo-events—press conferences, publicity stunts, manufactured issues—created to make some idea, policy, or act seem important.³¹ Indeed, several times in the past few years at least one radio and one television station in the San Francisco area have received calls from individuals planning demonstrations and protests. The expressed purpose of the calls was to determine at what time to hold the demonstration in order to be assured of maximum press coverage!

A second implication of our reliance on the media for much of our information is that to the extent that mass communications present a distorted, stereotyped, or biased picture of some part of the environment, and to the extent that a receiver is *unable to test the accuracy of that picture against some nonmedia standard*, then the image he structures on the basis of that information is apt to be distorted, stereotyped, or biased. For ex-

³⁰ Joe McGinnis, *The Selling of the President, 1968* (New York: Trident Press, 1969).

³¹ Daniel J. Boorstin, *The Image: A Guide to Pseudo-Events in America* (New York: Harper and Row, 1964).

ample, just a few years ago it was not difficult to find Europeans who conceived of the United States as a land given over entirely to cowboys and Indians in the West and gangsters and gun molls in the East, an image structured mainly on the basis of Hollywood movies. Even today, if the hypothetical "man from Mars" about whom we often hear were to construct an image of this country *solely* on the basis of current television fare, he might well conceive of a nation populated by widows and widowers, engaged in only white-collar occupations, and resorting to violence to resolve a large proportion of their problems.³²

Third, and closely related to the second point, what the media *do not report* may be as significant as what they do report. That is, the way we organize our image of reality can be as easily distorted because we receive incomplete or no information about parts of the environment as because we receive stereotyped or biased information. William Rivers contends that had the media covered urban ghettos *before* they erupted in the late 1960's, public awareness and concern might have been mobilized in order to correct intolerable conditions and head off the riots. As it was, a large part of the population was taken by surprise; they had received little previous information about conditions in the inner city.³³

The potential importance of the effects of what the media do not report becomes particularly clear when we consider that the men who run the cameras and presses *must select* some information to be passed along while condemning other information to the cutting-room floor or the copy editor's wastebasket. There simply is not enough time or space to report everything. David Manning White's classic "gatekeeper" studies found that of the approximately 12,400 column inches of wire copy received during one week by the wire editor of a Midwestern newspaper, 1,297 column inches (about 10 percent) were finally

³² For a number of interesting discussions of how films and television present various characters, situations, and themes, see various papers in Bernard Rosenberg and David Manning White, eds., *Mass Culture: The Popular Arts in America* (New York: The Free Press, 1957).

³³ William L. Rivers and Wilbur Schramm, *Responsibility in Mass Communications*, rev. ed. (New York: Harper and Row, 1969), pp. 175-89.

used! When we consider that each story passed through several additional "gates" (e.g., wire-service reporters and editors) before reaching the local wire copyeditor, the loss becomes even greater. Moreover, when questioned about why he rejected many of the stories which never made it into print, the editor's comments included such reasons as "Not interesting . . . Goes on all the time . . . Propaganda . . . Too far away . . . Too regional . . . He's too Red . . . B.S.!"³⁴

The consequences of such a selection process may well be one of the major reasons that Klapper found mass communications more likely to contribute to the status quo than to create change.³⁵ Several factors seem to combine to encourage the selecting out of information and material which is too contrary to the established order of things and the inclusion of materials congruent with the status quo. First, the individual reporter or editor views and interprets the world in terms of his own image of reality—his own beliefs, values, and norms. Thus, to the extent that his image reflects existing norms and values, he is likely to overlook or ignore new ways of perceiving the world or approaching problems. Second, Warren Breed has shown that newsmen respond to a number of subtle pressures which influence them to "slant" their reporting of events so as to conform with the publisher's implicit policy.³⁶ For example, an editorial policy which tends to be pro-Republican, cool toward organized labor, against a newly proposed highway route, and so forth, is likely to make itself felt not only in terms of stories favoring this policy, but also in the omission of information which counters it. Thus, to the extent that media policy reflects the norms of a given culture or subculture, so too will the information they transmit. Third, the fact that the media, particularly the entertainment media, must compete for a large share of the mass audience in order to maintain advertising revenue tends to influence them to shy away from the novel, the

³⁴ David Manning White, "The 'Gate Keeper': A Case Study in the Selection of News," *Journalism Quarterly* 27 (1950): 383-90.

³⁵ Klapper, *The Effects of Mass Communication*.

³⁶ Warren Breed, "Social Control in the Newsroom: A Descriptive Study," *Social Forces* 33(1955): 326-35.

controversial, or anything which does not appear to be guaranteed to gain them a large audience. For example, it has become almost a truism among television critics that any particular dramatic formula which attracts viewers on one network is relatively certain to be copied by competing networks. A brief glance at television program listings over the years will indicate that a successful "medical" show (e.g., Dr. Kildare) soon engenders a number of competing hospitals, doctors, and nurses; that a hit western seems to ensure a spate of prime-time showdowns at sundown; and that a widow (never a divorcee) with children who attracts an audience is soon to be joined by other single-parent families. One clear result of such programming is to impede effectively, if not eliminate, new, different, and/or controversial types of programs. In addition, Fred Friendly has described situations in which, when it came to a choice between broadcasting entertainment programs which attract large audiences and advertising revenues or something like a Senate committee hearing which tends to reduce audience size, the entertainment programs usually won out.³⁷ The point is that any or all of these factors encourage mass communication of information congruent with the status quo and discourage contrary or different messages.

Finally, mass communication's ability to influence how receivers organize new, previously unstructured aspects of the environment becomes particularly compelling when we consider that a large share of the mass audience, particularly the television audience, is composed of children. Fundamentally, childhood is a period of information-seeking during which the child learns what to expect from his environment and what his environment expects from him. It is a period during which much of the information the child encounters pertains, by definition, to new, previously unstructured aspects of his world. It is a period during which he is particularly dependent on others for information. Thus young children are particularly susceptible to the influence of communications. While it is obvious that children may obtain much of their conception of the world

³⁷ Fred W. Friendly, *Due to Circumstances beyond Our Control . . .* (New York: Vintage Books, 1967).

from parents and from other nonmedia sources (e.g., direct experience, friends, school), it is also clear that children need and obtain much information which these sources do not, cannot, or will not pass on. Albert Bandura points out that "under conditions of rapid social and technological change, many parental interests, attitudes, and role behaviors that were serviceable at an earlier period may have little functional value for members of the younger generation." He goes on to point out that the demonstrated efficacy of learning through symbolic modeling and the large amount of time young children spend watching television, which is a continuous source of symbolic models, provide ample reason to expect children to construct a significant part of their image of the world on the basis of mass-mediated information.³⁸

Indeed, there is a good deal of evidence that children (and adults) learn behaviors, norms, attitudes, and so forth, from film- and television-mediated presentations. For example, Flanders lists an extensive range of behaviors which have been demonstrated to follow from observation of symbolic models, including such things as problem-solving, delay of gratification, self-rewarding behavior, moral judgment, altruism, aggression, and resistance to temptation. Moreover, Bandura and his associates have shown that children are equally likely to learn such behaviors whether they observe a live or a film-mediated model, and a number of additional studies which have not made live-model vs. film-model comparisons have nevertheless demonstrated learning of film-mediated behavior. Similarly, early research on "Motion Pictures and Youth," conducted under the auspices of the Payne Fund, found that a single showing, to relatively naïve children ranging from the fourth grade to senior high school, of movies such as "All Quiet on the Western Front" or "Birth of a Nation" significantly influenced attitudes on issues as varied as capital punishment, war, the Chinese, the Negro—influences which in some cases per-

³⁸ Albert Bandura, "Social Learning Theory of Identificatory Processes," in D. A. Goslin, ed., *Handbook of Socialization Theory and Research* (Chicago: Rand McNally, 1969), p. 248.

sisted as long as nineteen months after viewing of the films. More recently, Albert Siegel found that a dramatic radio presentation affected the role expectations of naïve second-graders. Numerous other studies could be cited.³⁹ Suffice it to say that there is convincing experimental evidence that the mass media and their messages, particularly television to which the child has very early access,⁴⁰ can influence the way children organize their image of the world, at least over the short term.

There are still, however, a great many unanswered questions about the long-term effects of the mass media on children, about how television's repetitive themes might affect the child's developing image of reality. Such questions become particularly pressing when we consider that television drama, to which children are most likely to attend, presents a world dominated by white-collar occupations, bumbling fathers, and three-bedroom homes. It's a world in which, during 1968, conflict situations resulted in violence in almost 80 percent of all dramatic presentations. And it's a world of quarter-hourly messages that "to consume is to be happy." Well we might ask whether the norms and values inherent in such programming influence the norms and values of the child viewer, and to what extent the world of the picture tube shapes the child's expectations about the environment in which he must function. Recently there appeared in *The New Yorker* a cartoon showing an automobile with a flat tire pulled to the side of the road in a rainstorm, and two small children peering from within the car at their father as he knelt in the puddles and tried to change the tire. The caption represented the words of the father as he replied to an implied request from the two children: "Don't you un-

³⁹ J. P. Flanders, "A Review of Research on Imitative Behavior," *Psychological Bulletin* 69 (1968): 316-37; Albert Bandura, Dorothea Ross, and Sheila A. Ross, "Imitation of Film-Mediated Aggression," *Journal of Abnormal and Social Psychology* 67 (1963): 601-7; Ruth C. Peterson and L. L. Thurston, *Motion Pictures and the Social Attitudes of Children* (New York: Macmillan, 1933); Alberta Siegel, "The Influence of Violence in the Mass Media upon Children's Role Expectations," *Child Development* 29 (1958): 35-56.

⁴⁰ As Eleanor Maccoby reports in her review of the effects of mass communication on children, instances of playpens being placed in front of a television set so that infants can watch the screen are not uncommon.

derstand? This is *life*, this is what is happening. We *can't* switch to another channel." One senses that the cartoon may strike alarmingly close to the truth.⁴¹

The foregoing by no means exhausts the catalog of possible mass media effects. McLuhan, for example, contends that simply the nature of the medium—the way each structures and presents information—influences the way we perceive the world. Lazarsfeld and Merton point out that another social effect of the media's constant surveillance of the environment is the enforcement of social norms, almost the reverse of status conferral. That is, simply the threat of public exposure through the media may exert strong pressures against "deviant" behavior. Given the flood of information the media provide us, we may also ask about the effect of an information glut. Lazarsfeld and Merton speculated about a possible "narcotizing dysfunction," a substitution of knowledge and concern about the problems of the day for *doing* something about them. Some twenty years later we can go further and ask whether the sheer number of communications with which the media barrage us might not result in our overlooking important messages—or even in a kind of avoidance of communications.⁴²

Space precludes any comprehensive examination of all of the various effects that have been hypothesized or demonstrated to follow from the mass media and mass communications.⁴³ It should be clear, however, that mass communications can and do affect our lives—just as interpersonal communications do. The media have given us a much wider window on the world than was available to individuals and societies which preceded

⁴¹ For more extensive and detailed reviews of the effects of mass communications on children, see Eleanor E. Maccoby, "Effects of the Mass Media," in M. L. Hoffman and Lois W. Hoffman, eds., *Review of Child Development Research*, vol. 1 (New York: Russell Sage Foundation, 1964), pp. 239–52; Roberts, "Communication and Children."

⁴² McLuhan, *Understanding Media*; Lazarsfeld and Merton, "Mass Communication, Popular Taste and Organized Social Action."

⁴³ For example, Klapper, *The Effects of Mass Communication*; Walter Weiss "Effects of the Mass Media of Communication," in Gardner Lindzey and Elliot Aronson, eds., *Handbook of Social Psychology*, 2nd ed., vol. 5 (Reading, Mass.: Addison-Wesley, 1969), pp. 77–195; Walter Weiss, "Mass Communication," in *Annual Review of Psychology*, 1971 (Palo Alto: Annual Reviews, Inc., 1969).

ours. We attend to mass communications, we learn from them, and for certain things we rely on them.

Nevertheless, with the media as with all other sources of information we must remember that each individual receiver is in control. He decides what to attend to, what to select from the array of messages available to him, what any communication means, and how to respond to it.

A. ATTITUDES, INFORMATION, AND EFFECTS

INTRODUCTION

Approaches to the Study of Mass Communication Effects: Attitudes and Information

IT SEEMS intuitively obvious that most human communications are produced with the intent of causing some effect, of shaping the minds and steering the behavior of others. Regardless of how we formulate the goal of any message—to sell a product, change an attitude, educate a child, share our joys or sorrows, elicit a vote, entertain or inform the public, or simply to establish some kind of relationship with another—each time we send a message we at least implicitly hope to affect the way our audience perceives some part of his world, relates and responds to some part of his environment. It is not surprising, then, that one of the more frequent questions voiced by students and observers of human behavior has been, “What are the effects of communications on people?”

On the other hand, as many of the preceding selections in this volume indicate, the trend in communication research over the past several decades has been away from concern with what communications do to people and toward the study of what people do with communications. The receiver of a communication has been demonstrated not to be a defenseless target at the mercy of any message he happens to encounter. Rather, he is an active participant in a communication relationship, choosing which messages to attend to, interpreting them in terms of his own frame of reference, responding to them as his own needs, values, desires, capabilities, and opportunities dictate and allow. And often his interpretations and responses are vastly different from those intended by the sender of a message.

Such “obstinacy” of the audience is further magnified when

we concern ourselves with the effects of *mass* communications. Characteristics of the mass communication situation, such as the receiver's freedom from many of the social constraints which operate in interpersonal communication, greatly attenuated feedback, and the lack of opportunity to tailor messages for specific people, allow any individual receiver a good deal more latitude of interpretation and response than he has when speaking face-to-face with friend, colleague, or acquaintance. Moreover, the sheer size and heterogeneity of the mass audience almost guarantees a diversity of frames of reference, needs, values, and so forth, and thus a diversity of responses to mass communications.

This is not to say, however, that we cannot fruitfully study the effects of mass communications. Quite the contrary! People do use and respond to mass-mediated information. What the media say, and how they say it, does affect the way in which people relate to their world. For example, although Hadley Cantril shows that much of the panic engendered among some members of the audience¹ by Orson Welles's production of *War of the Worlds* could be traced to individual characteristics of those people, he also demonstrates that the content and form of that particular program occurring at that particular time also contributed to the behavior of those who "took to the hills." Similarly, research on the Kennedy-Nixon television debates illustrates not only that differing attitudes and allegiances among members of the television audience mediated different responses to the programs, but also that the style of presentation and the differing personalities of the two candidates influenced how various people were affected. In other words, what people bring to the media *interacts* with what the media bring to people. Clearly the job of the communication researcher is not solely one of attempting to determine what mass communications do to people. Nor is it solely one of discovering what people do with mass communications. Rather the task is one of considering all the elements in the communication situation, of

¹ In fact, contrary to popular belief, a relatively small proportion of the listening audience actually engaged in panic behavior.

discovering which communications under which conditions contribute to which effects among which people.

As the articles in the following sections illustrate, there are a number of ways in which mass communication effects can be studied, a number of perspectives from which they may be approached.

We can, for example, distinguish between experimental and nonexperimental approaches. In experimental studies the investigator manipulates some and controls others of those variables which he thinks may mediate communication effects (e.g., he might manipulate source credibility by attributing a message to a highly trustworthy source for one group of people and to an untrustworthy source for a second group, while controlling other factors by keeping other aspects of the communication situation the same for both groups and, most important, by assigning subjects to one or the other of the groups on a random basis in order to insure that they are equivalent before receiving the message). In nonexperimental studies, on the other hand, all possible influential factors which might affect a receiver's response to the communication are allowed to vary freely. In this type of study concern is not so much with how a particular variable influences a given effect, but with whether and how a particular effect occurs given that all factors operate. Through the use of interviews, questionnaires, and a variety of behavioral indicators, the investigator gathers data on characteristics of the receivers of a message, on the communication situation in which the message was received, and on their responses to the message. He then attempts to relate various receiver and situational characteristics to the effects which appear to follow from the communication. The work of Carl Hovland and his colleagues on the impact of "one-sided" versus "two-sided" persuasive messages, some of the research reported by Herbert Kelman, and a number of the studies of children's responses to television cited by Alberta Siegel, all provide examples of the experimental approach. Nonexperimental research is exemplified in articles such as Herbert Hyman and Paul

Sheatsley's study of the effectiveness of information campaigns, Wilbur Schramm's description of the uses to which people put mass communications during a crisis, and Elihu Katz's work on the diffusion of innovation.

Mass communication effects also may be approached at several levels of human organization. We can look at how mass-mediated messages influence individuals, as in the articles by Kelman and by Cantril. Or we can study the effects of mass communications at the level of the social grouping or society, as exemplified in Paul Lazarsfeld and Robert K. Merton's examination of the functions of mass communication in society. Or we can look at effects at the level of entire culture groupings, somewhat in the manner of Frederick T. C. Yu's approach to communication in Communist China.

Still another approach might be characterized in terms of whether or not the investigator conceptualizes effects in terms of the explicit intent of the communication(s). Studies such as those by Dorwin Cartwright, on the sale of war bonds, and Hyman and Sheatsley, on increasing public knowledge about the United Nations, might be called studies of communication effectiveness because they are concerned with the realization of the avowed goal of particular communication campaigns. On the other hand, the Langs' examination of reactions to political information between campaigns and a number of the investigations of children's responses to television-mediated violence reported by Roberts and Schramm concentrate on what might be called indirect consequences of mass communication—effects which may not be specifically intended (and which may even be unintended), but which nevertheless may follow from the message.

The list of perspectives from which to view mass communication effects can be made even longer. A researcher might wish to study how communications influence cognitions, or emotions, or overt behavior. He may decide to concern himself with immediate, short-term responses to mass-mediated messages, or he may concentrate his attention on long-term effects. He may decide to define effects in terms of some particular area of human endeavor, perhaps looking at how mass communica-

tions influence political behavior, or economic behavior, or social attitudes, or popular taste. In short, there are numerous ways in which mass communication effects may be conceptualized, numerous methodologies which may be applied to their study, numerous questions about effects which may be formulated. Each has strengths and weaknesses; each can answer some questions and not others; each serves necessary functions. Indeed, given that communication is the fundamental social process, and that mass communications have become a ubiquitous part of our lives, a variety of methodological and conceptual approaches to mass communication effects seem imperative if we are ever to develop a sound understanding of the way in which the mass media contribute to how modern man relates to his world.

In the pages that follow we have chosen to classify studies into what might be termed "problem areas." These are areas which, because of the mass media's capability for conveying information to large numbers of people, and thus for potentially contributing to significant changes in individual and social behavior, have become foci of research concern. It should be noted, however, that the categorization scheme we have selected is only one of many that we could have chosen. For example, the selections we have grouped to exemplify the political effects of mass communications could just as well have been classified as examples of social effects. The papers on innovation and change also speak to the more general question of how the mass media influence information and attitudes. Indeed, the perceptive reader will have noted that many of the selections which comprise the first part of this book—generally dealing with the *process* of communication—might as well have been approached as studies of communication *effects*. Similarly, most of the pieces which follow say as much about the communication process as they do about communication effects.

The six articles which comprise the first subsection look at how communications affect the information levels and attitudes of members of the audience. In a sense, this is the most basic and general of all "problem areas" since we generally assume

that in order for mass communications to contribute to changes in individual and social behavior they necessarily must mediate changes in information and/or attitudes. Whether concern is with how the mass media might serve to improve race relations, contribute to juvenile delinquency, sway the votes of the electorate, speed acceptance of an innovation, sell a product, or aid in the development of an underdeveloped nation, the fundamental power of mass communications lies in their potential for providing information and shaping attitudes about each of these things.

That potential, of course, depends on a wide variety of factors which function to influence whether and how communications affect the information and/or attitudes of the audience. For purposes of discussion, these can be labeled message factors, situation factors, and audience factors. Message factors include such things as how the message is organized, the source to which it is attributed, what it includes and what it omits, its clarity, the nature of its appeal and so on. Situation factors pertain to variables such as whether a message is received while alone or in a group, whether the setting in which it is received makes some beliefs or values more salient than others, the presence or absence of distracting elements in the reception situation, and the historical context in which the message is received. Audience factors, which have received the lion's share of attention in recent years, range from the intellectual capabilities of various receivers, to their needs, their values, their various personality characteristics, and so forth. In short, variations in numerous factors relating to every aspect of the communication relationship have been shown to mediate the effect of a communication upon members of the audience.

Moreover, the influence of most of these factors is usually the result of some kind of interaction between two or more of them. That is, the consequence of changing something like the credibility of the source of a message might depend on a number of other things—factors such as the importance of the issue to members of the audience, the discrepancy between the position advocated by the message and the position held by the receiver, or the complexity of the information presented. The six

articles that follow illustrate a few of the interactions which can take place. For example, Hovland, Lumsdaine, and Sheffield's investigation of the effect of presenting a one-sided versus a two-sided argument when attempting to engender opinion change clearly shows that it depends on such things as the receiver's intellectual capabilities or his initial position on the issue. That is, the effectiveness of the form of a message changes as various characteristics of the audience change, and the effect of the message depends on this interaction. Similarly, Kelman contends that different situations and different psychological factors within audience members lead to differential attention to various message components, hence to different modes of information processing and opinion change; Krugman argues that the kind of message sent interacts with the degree of receiver involvement in the topic of the message. Indeed, either implicitly or explicitly, each of the following articles illustrates that we should expect few straightforward relationships when we study the effects of mass communication.

Perhaps the most important generalization to be drawn from the articles which comprise this section is that information and attitudes are inextricably intertwined. What we know about something clearly influences our attitudes toward it. Conversely, our attitudes toward something clearly influence how we organize what we know about it, and whether and how we interpret new information about it. Thus Kelman argues that opinion change may be mediated by any of several processes, and that whichever process operates is a direct function of the receiver's confidence in his information level on a given issue. The studies by Cartwright and by Hyman and Sheatsley indicate that whether and how members of the audience deal with new information is strongly influenced by their prior attitudes. Hovland, Lumsdaine, and Sheffield demonstrate that opinion change is clearly related to the receiver's ability to deal with information, and Krugman's article is based on the premise that the information contained in television commercials is effective because commercials deal with topics that are not involving enough to activate attitudinal defenses. Finally, the attitude-information interaction is implicit in a large part of Hovland's

reconciliation of the different findings of experimental and survey studies of persuasive communications.

The articles which comprise this first section on the effects of mass communication should serve as a general introduction to the sections which follow. Regardless of whether our concern is with the social consequences of mass communications, or with their impact on political processes, or with how they function to facilitate acceptance of new ideas or practices, or with what future communication media may offer us, at bottom the questions we ask remain the same. That is, we want to know how mass communications contribute to our information about various parts of the world and how mass communications contribute to our opinions and attitudes toward various parts of the world.

HERBERT C. KELMAN

Processes of Opinion Change

What are the processes that underlie opinion formation and change? How do various elements in the communication situation—characteristics of the source, the message, the receiver, and so forth—operate to facilitate or impede the persuasion process? What determines the durability of opinion change, or the translation of a verbally expressed opinion into corresponding behavior? In the following pages, Kelman attempts to answer some of these questions by conceptualizing opinion formation and change in terms of three qualitatively different social-influence processes—compliance, identification, and internalization—each of which is determined by a distinct set of antecedent conditions and each of which produced a distinct set of consequences. The model posits that by noting qualitative differences in the nature of the motivational systems activated in the influence situation, in the source of the influencing agent's power, and in the manner of achieving the desired response, we can determine which influence process will operate. It goes on to contend that knowledge of which social influence process mediates opinion change should enable us to predict such things as the subsequent conditions under which the induced response will be expressed or performed, the durability of the induced change, and so forth. Dr. Kelman is the Richard Clarke Cabot Professor of Social Ethics at Harvard University. This article was originally published and copyrighted by the *Public Opinion Quarterly* in 1961. It is reprinted here by permission of the author and the publisher.

PERSISTENT CONCERN in the analysis of public opinion data is the "meaning" that one can ascribe to the observed distributions and trends—and to the positions taken by particular individuals and segments of the population. Clearly, to understand what opinion data mean we have to know considerably more than the direction of an individual's responses or the distribution of responses in the population. We need information that will allow us to make some inferences about the characteristics of the observed opinions—their intensity, their salience, the level of commitment that they imply. We need information about the motivational bases of these opinions—about the

functions that they fulfill for the individual and the motivational systems in which they are embedded.¹ We need information about the cognitive links of the opinions—the amount and the nature of information that supports them, the specific expectations and evaluations that surround them.

The need for more detailed information becomes even more apparent when we attempt to use opinion data for the prediction of subsequent behavior. What is the likelihood that the opinions observed in a particular survey will be translated into some form of concrete action? What is the nature of the actions that people who hold a particular opinion are likely to take, and how are they likely to react to various events? How likely are these opinions to persist over time and to generalize to related issues? What are the conditions under which one might expect these opinions to be abandoned and changed? Such predictions can be made only to the extent to which we are informed about the crucial dimensions of the opinions in question, about the motivations that underlie them, and about the cognitive contexts in which they are held.

Inferring the Meaning of Opinions

In a certain sense, the need for more detailed information about opinions can (and must) be met by improvements and refinements in the methodology of opinion assessment. A great deal of progress in this direction has already been made in recent years. Thus many widely accepted features of interviewing technique are specifically designed to elicit information on which valid inferences about the the meaning of opinions can be based: the creation of a relaxed, nonjudgmental atmosphere; the emphasis on open-ended questions; the progressive funneling from general to specific questions; the use of probes, of indirect questions, and of interlocking questions; and so on. These procedures facilitate inferences (1) by maximizing the

¹ For discussions of the different motivational bases of opinion, see I. Sarnoff and D. Katz, "The Motivational Bases of Attitude Change," *Journal of Abnormal and Social Psychology* 49 (1954): 115-24; M. B. Smith, J. S. Bruner, and R. W. White, *Opinions and Personality* (New York, Wiley, 1956).

likelihood that the respondent will give rich and full information and thus reveal the motivational and cognitive structure underlying the expressed opinions, and (2) by minimizing the likelihood that the respondent will consciously or unconsciously distort his "private" opinions when expressing them to the interviewer.

Similarly, when attitudes are assessed by means of questionnaires, it is possible to approximate these methodological goals. In part, this is accomplished by the instructions, which can motivate the subject to respond fully and honestly and assure him of confidentiality or anonymity. In part it is accomplished by the use of indirect and projective questions, and by the inclusion of a series of interrelated items in the questionnaire. And, in part, it is possible to make inferences about the meaning of opinions by the use of various scaling devices in the analysis of the data.

There is no question about the importance of these methodological advances, but in and of themselves they do not solve the problem of inference. They increase the investigator's ability to obtain rich and relatively undistorted information on which he can then base valid inferences. But, no matter how refined the techniques, they do not provide direct information about the meaning of the opinions and do not permit automatic predictions to subsequent behavior: the investigator still has to make inferences from the data.

To make such inferences, the student of public opinion needs a theoretical framework which accounts for the adoption and expression of particular opinions on the part of individuals and groups. Such a framework can serve as a guide in the collection of data; it can provide a systematic basis for deciding what information is relevant and what questions should be asked in order to permit the drawing of inferences. Similarly, it can serve as a guide for interpreting the data and deriving implications from them.

The need for such a framework is particularly apparent when one attempts to make predictions about subsequent behavior on the basis of opinion data. For example, in a relaxed interview situation a particular respondent may express himself

favorably toward socialized medicine. What are the chances that he will take the same position in a variety of other situations? To answer this, we would need a theoretical scheme for the analysis of interaction situations, in terms of which we could make some inferences about the structure and meaning of this particular interview situation as compared to various other situations in which the issue of socialized medicine might arise. How would we expect this same respondent to react to a concerted campaign by the medical association which links federal insurance programs with creeping socialism? To answer this, we would need a theory of opinion formation and change, in terms of which we could make some inferences about the characteristics of opinions formed under different conditions.

Progress in the analysis of public opinion, then, requires theoretical development along with methodological improvements. For this development, it should be possible to draw on some of the current theoretical thinking and associated research in social psychology. There are two focuses of social-psychological theorizing and research that would appear to be particularly germane to the analysis of public opinion. One is the study of processes of social interaction as such. Such diverse approaches to the analysis of social interaction as those of Getzels,² Goffman,³ and Jones and Thibaut,⁴ for example, can be useful for conceptualizing the determinants of *opinion expression*. Thus, by using one or another of these schemes, the investigator can make some formulations about the expectations that the respondent brought to the interview situation and the goals that he was trying to achieve in this interaction. On the basis of such a formulation, he can make inferences about the meaning of the opinions expressed in this situation and about

² J. W. Getzels, "The Question-Answer Process: A Conceptualization and Some Derived Hypotheses for Empirical Examination," *Public Opinion Quarterly* 18 (1954): 80-91.

³ See, for example, E. Goffman, "On Face-work: An Analysis of Ritual Elements in Social Interaction," *Psychiatry* 18 (1955): 213-31; and "Alienation from Interaction," *Human Relations* 10 (1957): 47-60.

⁴ E. E. Jones and J. W. Thibaut, "Interaction Goals as Bases of Inference in Interpersonal Perception," in R. Tagiuri and L. Petrullo, eds., *Person Perception and Interpersonal Behavior* (Stanford: Stanford University Press, 1958), pp. 151-78.

their implications for subsequent behavior—for example, about the likelihood that similar opinions will be expressed in a variety of other situations.

The second relevant focus of social-psychological theorizing and research is the study of processes of social influence and the induction of behavior change. Theoretical analyses in this area can be useful for conceptualizing the determinants of *opinion formation* and *opinion change*. They can help the investigator in making formulations about the sources of the opinions expressed by the respondent—the social conditions under which they were adopted, the motivations that underlie them, and the social and personal systems in which they are embedded. On the basis of such a formulation, again, he can make inferences about the meaning and implications of the opinions ascertained.

The model that I shall present here emerged out of the second research focus—the study of social influence and behavior change. It is, essentially, an attempt to conceptualize the processes of opinion formation and opinion change. It starts with the assumption that opinions adopted under different conditions of social influence, and based on different motivations, will differ in terms of their qualitative characteristics and their subsequent histories. Thus, if we know something about the determinants and motivational bases of particular opinions, we should be able to make predictions about the conditions under which they are likely to be expressed, the conditions under which they are likely to change, and other behavioral consequences to which they are likely to lead. Ideally, such a model can be useful in the analysis of public opinion by suggesting relevant variables in terms of which opinion data can be examined and predictions can be formulated.

The Study of Social Influence

Social influence has been a central area of concern for experimental social psychology almost since its beginnings. Three general research traditions in this area can be distinguished:

(1) the study of social influences on judgments, stemming from the earlier work on prestige suggestion;⁵ (2) the study of social influences arising from small-group interaction;⁶ and (3) the study of social influences arising from persuasive communications.⁷ In recent years, there has been a considerable convergence between these three traditions, going hand in hand with an increased interest in developing general principles of social influence and socially induced behavior change.

One result of these developments has been that many investigators found it necessary to make qualitative distinctions between different types of influence. In some cases, these distinctions arose primarily out of the observation that social influence may have qualitatively different effects, that it may produce different kinds of change. For example, under some conditions it may result in mere public conformity—in superficial changes on a verbal or overt level without accompanying changes in belief; in other situations it may result in private acceptance—in a change that is more general, more durable, more integrated with the person's own values.⁸ Other investigators found it necessary to make distinctions because they observed that influence may occur for different reasons, that it may arise out of different motivations and orientations. For example, under some conditions influence may be primarily informational—the subject may conform to the influencing person or group because he views him as a source of valid information; in other situations influence may be primarily

⁵ See, for example, S. E. Asch, *Social Psychology* (New York: Prentice-Hall, 1952).

⁶ See, for example, D. Cartwright and A. Zander, eds., *Group Dynamics* (Evanston, Ill.: Row, Peterson, 1953).

⁷ See, for example, C. I. Hovland, I. L. Janis, and H. H. Kelley, *Communication and Persuasion* (New Haven: Yale University Press, 1953).

⁸ See, for example, L. Festinger, "An Analysis of Compliant Behavior," in M. Sherif and M. O. Wilson, eds., *Group Relations at the Crossroads* (New York: Harper, 1953), pp. 232-56; H. C. Kelman, "Attitude Change as a Function of Response Restriction," *Human Relations* 6 (1953): 185-214; J. R. P. French, Jr., and B. Raven, "The Bases of Social Power," in D. Cartwright, ed., *Studies in Social Power* (Ann Arbor: Institute for Social Research, 1959), pp. 150-67; and Marie Jahoda, "Conformity and Independence," *Human Relations* 12 (1959): 99-120.

normative—the subject may conform in order to meet the positive expectations of the influencing person or group.⁹

My own work can be viewed in the general context that I have outlined here. I started out with the distinction between public conformity and private acceptance, and tried to establish some of the distinct determinants of each. I became dissatisfied with this dichotomy as I began to look at important examples of social influence that could not be encompassed by it. I was especially impressed with the accounts of ideological conversion of the “true believer” variety, and with the recent accounts of “brainwashing,” particularly the Chinese Communist methods of “thought reform.”¹⁰ It is apparent that these experiences do not simply involve public conformity, but that indeed they produce a change in underlying beliefs. But it is equally apparent that they do not produce what we would usually consider private acceptance—changes that are in some sense integrated with the person’s own value system and that have become independent of the external source. Rather, they seem to produce new beliefs that are isolated from the rest of the person’s values and that are highly dependent on external support.

These considerations eventually led me to distinguish three processes of social influence, each characterized by a distinct set of antecedent and a distinct set of consequent conditions. I have called these processes *compliance*, *identification*, and *internalization*.

Three Processes of Social Influence

Compliance can be said to occur when an individual accepts influence from another person or from a group because he

⁹ See, for example, M. Deutsch and H. B. Gerard, “A Study of Normative and Informational Social Influence upon Individual Judgment,” *Journal of Abnormal and Social Psychology* 51 (1955): 629–36; J. W. Thibaut and L. Strickland, “Psychological Set and Social Conformity,” *Journal of Personality* 25 (1956): 115–29; and J. M. Jackson and H. D. Saltzstein, “The Effect of Person-Group Relationships on Conformity Processes,” *Journal of Abnormal and Social Psychology* 57 (1958): 17–24.

¹⁰ For instance, R. J. Lifton, “‘Thought Reform’ of Western Civilians in Chinese Communist Prisons,” *Psychiatry* 19 (1956): 173–95.

hopes to achieve a favorable reaction from the other. He may be interested in attaining certain specific rewards or in avoiding certain specific punishments that the influencing agent controls. For example, an individual may make a special effort to express only "correct" opinions in order to gain admission into a particular group or social set, or in order to avoid being fired from his government job. Or the individual may be concerned with gaining approval or avoiding disapproval from the influencing agent in a more general way. For example, some individuals may compulsively try to say the expected thing in all situations and please everyone with whom they come in contact, out of a disproportionate need for favorable responses from others of a direct and immediate kind. In any event, when the individual complies, he does what the agent wants him to do—or what he thinks the agent wants him to do—because he sees this as a way of achieving a desired response from him. He does not adopt the induced behavior—for example, a particular opinion response—because he believes in its content, but because it is instrumental in the production of a satisfying social effect. What the individual learns, essentially, is to say or do the expected thing in special situations, regardless of what his private beliefs may be. Opinions adopted through compliance should be expressed only when the person's behavior is observable by the influencing agent.

Identification can be said to occur when an individual adopts behavior derived from another person or a group because this behavior is associated with a satisfying self-defining relationship to this person or group. By a self-defining relationship I mean a role relationship that forms a part of the person's self-image. Accepting influence through identification, then, is a way of establishing or maintaining the desired relationship to the other, and the self-definition that is anchored in this relationship.

The relationship that an individual tries to establish or maintain through identification may take different forms. It may take the form of classical identification, that is, of a relationship in which the individual takes over all or part of the role of the influencing agent. To the extent to which such a re-

relationship exists, the individual defines his own role in terms of the role of the other. He attempts to be like or actually to *be* the other person. By saying what the other says, doing what he does, believing what he believes, the individual maintains this relationship and the satisfying self-definition that it provides him. An influencing agent who is likely to be an attractive object for such a relationship is one who occupies a role desired by the individual—who possesses those characteristics that the individual himself lacks—such as control in a situation in which the individual is helpless, direction in a situation in which he is disoriented, or belongingness in a situation in which he is isolated.

The behavior of the brainwashed prisoner in Communist China provides one example of this type of identification. By adopting the attitudes and beliefs of the prison authorities—including *their* evaluation of *him*—he attempts to regain his identity, which has been subjected to severe threats. But this kind of identification does not occur only in such severe crisis situations. It can also be observed, for example, in the context of socialization of children, where the taking over of parental attitudes and actions is a normal, and probably essential, part of personality development. The more or less conscious efforts involved when an individual learns to play a desired occupational role and imitates an appropriate role model would also exemplify this process. Here, of course, the individual is much more selective in the attitudes and actions he takes over from the other person. What is at stake is not his basic sense of identity or the stability of his self-concept, but rather his more limited “professional identity.”

The self-defining relationship that an individual tries to establish or maintain through identification may also take the form of a reciprocal role relationship—that is, of a relationship in which the roles of the two parties are defined with reference to one another. An individual may be involved in a reciprocal relationship with another specific individual, as in a friendship relationship between two people. Or he may enact a social role which is defined with reference to another (reciprocal) role, as in the relationship between patient and doctor. A reciprocal-

role relationship can be maintained only if the participants have mutually shared expectations of one another's behavior. Thus, if an individual finds a particular relationship satisfying, he will tend to behave in such a way as to meet the expectations of the other. In other words, he will tend to behave in line with the requirements of this particular relationship. This should be true regardless of whether the other is watching or not; quite apart from the reactions of the other, it is important to the individual's own self-concept to meet the expectations of his friendship role, for example, or those of his occupational role.

Thus the acceptance of influence through identification should take place when the person sees the induced behavior as relevant to and required by a reciprocal-role relationship in which he is a participant. Acceptance of influence based on a reciprocal-role relationship is similar to that involved in classical identification in that it is a way of establishing or maintaining a satisfying self-defining relationship to another. The nature of the relationship differs, of course. In one case it is a relationship of identity; in the other, one of reciprocity. In the case of reciprocal-role relationships, the individual is not identifying with the other in the sense of taking over *his* identity, but in the sense of empathically reacting in terms of the other person's expectations, feelings, or needs.

Identification may also serve to maintain an individual's relationship to a group in which his self-definition is anchored. Such a relationship may have elements of classical identification as well as of reciprocal roles: to maintain his self-definition as a group member an individual, typically, has to model his behavior along particular lines and has to meet the expectations of his fellow members. An example of identification with a group would be the member of the Communist party who derives strength and a sense of identity from his self-definition as part of the vanguard of the proletarian revolution and as an agent of historical destiny. A similar process, but at a low degree of intensity, is probably involved in many of the conventions that people acquire as part of their socialization into a particular group.

Identification is similar to compliance in that the individual does not adopt the induced behavior because its content per se is intrinsically satisfying. Identification differs from compliance, however, in that the individual actually believes in the opinions and actions that he adopts. The behavior is accepted both publicly and privately, and its manifestation does not depend on observability by the influencing agent. It does depend, however, on the role that an individual takes at any given moment in time. Only when the appropriate role is activated—only when the individual is acting within the relationship upon which the identification is based—will the induced opinions be expressed. The individual is not primarily concerned with pleasing the other, with giving him what he wants (as in compliance), but he is concerned with meeting the other's expectations for his own role performance. Thus, opinions adopted through identification do remain tied to the external source and dependent on social support. They are not integrated with the individual's value system, but rather tend to be isolated from the rest of his values—to remain encapsulated.

Finally, *internalization* can be said to occur when an individual accepts influence because the induced behavior is congruent with his value system. It is the content of the induced behavior that is intrinsically rewarding here. The individual adopts it because he finds it useful for the solution of a problem, or because it is congenial to his own orientation, or because it is demanded by his own values—in short, because he perceives it as inherently conducive to the maximization of his values. The characteristics of the influencing agent do play an important role in internalization, but the crucial dimension here—as we shall see below—is the agent's credibility, that is, his relation to the content.

The most obvious examples of internalization are those that involve the evaluation and acceptance of induced behavior on rational grounds. A person may adopt the recommendations of an expert, for example, because he finds them relevant to his own problems and congruent with his own values. Typically, when internalization is involved, he will not accept these recommendations in toto, but he will modify them to some degree

so that they will fit his own unique situation. Or a visitor to a foreign country may be challenged by the different patterns of behavior to which he is exposed, and he may decide to adopt them (again, selectively and in modified form) because he finds them more in keeping with his own values than the patterns in his home country. I am not implying, of course, that internalization is always involved in the situations mentioned. One would speak of internalization only if acceptance of influence took the particular form that I described.

Internalization, however, does not necessarily involve the adoption of induced behavior on rational grounds. I would not want to equate internalization with rationality, even though the description of the process has decidedly rationalist overtones. For example, I would characterize as internalization the adoption of beliefs because of their congruence with a value system that is basically *irrational*. Thus an authoritarian individual may adopt certain racist attitudes because they fit into his paranoid, irrational view of the world. Presumably, what is involved here is internalization, since it is the content of the induced behavior and its relation to the person's value system that is satisfying. Similarly, it should be noted that congruence with a person's value system does not necessarily imply logical consistency. Behavior would be congruent if, in some way or other, it fit into the person's value system, if it seemed to belong there and be demanded by it.

It follows from this conception that behavior adopted through internalization is in some way—rational or otherwise—integrated with the individual's existing values. It becomes part of a personal system, as distinguished from a system of social-role expectations. Such behavior gradually becomes independent of the external source. Its manifestation depends neither on observability by the influencing agent nor on the activation of the relevant role, but on the extent to which the underlying values have been made relevant by the issues under consideration. This does not mean that the individual will invariably express internalized opinions, regardless of the social situation. In any specific situation, he has to choose among competing values in the face of a variety of situational require-

ments. It does mean, however, that these opinions will at least enter into competition with other alternatives whenever they are relevant in content.

It should be stressed that the three processes are not mutually exclusive. While they have been defined in terms of pure cases, they do not generally occur in pure form in real-life situations. The examples that have been given are, at best, situations in which a particular process predominates and determines the central features of the interaction.

Antecedents and Consequents of the Three Processes

For each of the three processes, a distinct set of antecedents and a distinct set of consequents have been proposed. These are summarized in the table below. First, with respect to the antecedents of the three processes, it should be noted that no systematic quantitative differences between them are hypothesized. The probability of each process is presented as a function of the same three determinants: the importance of the induction for the individual's goal achievement, the power of the influencing agent, and the prepotency of the induced response. For each process, the magnitude of these determinants may vary over the entire range: each may be based on an induction with varying degrees of importance, on an influencing agent with varying degrees of power, and so on. The processes differ only in terms of the *qualitative* form that these determinants take. They differ, as can be seen in the table, in terms of the *basis* for the importance of the induction, the *source* of the influencing agent's power, and the *manner* of achieving prepotency of the induced response.

1. The processes can be distinguished in terms of the basis for the importance of the induction, that is, in terms of the nature of the motivational system that is activated in the influence situation. What is it about the influence situation that makes it important, that makes it relevant to the individual's goals? What are the primary concerns that the individual brings to the situation or that are aroused by it? The differences between the three processes in this respect are implicit in

TABLE 1. SUMMARY OF THE DISTINCTIONS BETWEEN THE THREE PROCESSES

	Compliance	Identification	Internalization
Antecedents:			
1. Basis for the importance of the induction	Concern with social effect of behavior	Concern with social anchorage of behavior	Concern with value congruence of behavior
2. Source of power of the influencing agent	Means control	Attractiveness	Credibility
3. Manner of achieving prepotency of the induced response	Limitation of choice behavior	Delineation of role requirements	Reorganization of means-ends framework
Consequents:			
1. Conditions of performance of induced response	Surveillance by influencing agent	Salience of relationship to agent	Relevance of values to issue
2. Conditions of change and extinction of induced response	Changed perception of conditions for social rewards	Changed perception of conditions for satisfying self-defining relationships	Changed perception of conditions for value maximization
3. Type of behavior system in which induced response is embedded	External demands of a specific setting	Expectations defining a specific role	Person's value system

the descriptions of the processes given above. (a) To the extent that the individual is concerned—for whatever reason—with the *social effect* of his behavior, influence will tend to take the form of compliance. (b) To the extent that he is concerned with the *social anchorage* of his behavior, influence will tend to take the form of identification. (c) To the extent that he is concerned with the *value congruence* of his behavior (rational or otherwise), influence will tend to take the form of internalization.

2. A difference between the three processes in terms of the

source of the influencing agent's power is hypothesized. (a) To the extent that the agent's power is based on his *means control*, influence will tend to take the form of compliance. An agent possesses means control if he is in a position to supply or withhold means needed by the individual for the achievement of his goals. The perception of means control may depend on the agent's *actual* control over specific rewards and punishments, or on his *potential* control, which would be related to his position in the social structure (his status, authority, or general prestige). (b) To the extent that the agent's power is based on his *attractiveness*, influence will tend to take the form of identification. An agent is attractive if he occupies a role which the individual himself desires¹¹ or if he occupies a role reciprocal to one the individual wants to establish or maintain. The term "attractiveness," as used here, does not refer to the possession of qualities that make a person likable, but rather to the possession of qualities on the part of the agent that make a continued relationship to him particularly desirable. In other words, an agent is attractive when the individual is able to derive satisfaction from a self-definition with reference to him. (c) To the extent that the agent's power is based on his *credibility*, influence will tend to take the form of internalization. An agent possesses credibility if his statements are considered truthful and valid, and hence worthy of serious consideration. Hovland, Janis, and Kelley¹² distinguish two bases for credibility: expertness and trustworthiness. In other words, an agent may be perceived as possessing credibility because he is likely to *know* the truth, or because he is likely to *tell* the truth. Trustworthiness, in turn, may be related to overall respect, likemindedness, and lack of vested interest.

3. It is proposed that the three processes differ in terms of the way in which prepotency is achieved. (a) To the extent that the induced response becomes prepotent—that is, becomes a

¹¹ This is similar to John Whiting's conception of "status envy" as a basis for identification. See J. W. M. Whiting, "Sorcery, Sin, and the Superego," in M. R. Jones, ed., *Nebraska Symposium on Motivation* (Lincoln: University of Nebraska Press, 1959), pp. 174-95.

¹² Hovland, Janis, and Kelley, *Communication and Persuasion*, p. 21.

“distinguished path” relative to alternative response possibilities—because the individual’s choice behavior is limited, influence will tend to take the form of compliance. This may happen if the individual is pressured into the induced response, or if alternative responses are blocked. The induced response thus becomes prepotent because it is, essentially, the only response permitted: the individual sees himself as having no choice and as being restricted to this particular alternative. (b) To the extent that the induced response becomes prepotent because the requirements of a particular role are delineated, influence will tend to take the form of identification. This may happen if the situation is defined in terms of a particular role relationship and the demands of that role are more or less clearly specified; for instance, if this role is made especially salient and the expectations deriving from it dominate the field. Or it may happen if alternative roles are made ineffective because the situation is ambiguous and consensual validation is lacking. The induced response thus becomes prepotent because it is one of the few alternatives available to the individual: his choice behavior may be unrestricted, but his opportunity for selecting alternative responses is limited by the fact that he is operating exclusively from the point of view of a particular role system. (c) Finally, to the extent that the induced response becomes prepotent because there has been a reorganization in the individual’s conception of means-ends relationships, influence will tend to take the form of internalization. This may happen if the implications of the induced response for certain important values—implications of which the individual had been unaware heretofore—are brought out, or if the advantages of the induced response as a path to the individual’s goals, compared to the various alternatives that are available, are made apparent. The induced response thus becomes prepotent because it has taken on a new meaning: as the relationships between various means and ends become restructured, it emerges as the preferred course of action in terms of the person’s own values.

Depending, then, on the nature of these three antecedents, the influence process will take the form of compliance, identifi-

cation, or internalization. Each of these corresponds to a characteristic pattern of internal responses—thoughts and feelings—in which the individual engages as he accepts influence. The resulting changes will, in turn, be different for the three processes, as indicated in the second half of the table. Here, again, it is assumed that there are no systematic quantitative differences between the processes, but rather qualitative variations in the subsequent histories of behavior adopted through each process.

1. It is proposed that the processes differ in terms of the subsequent conditions under which the induced response will be performed or expressed. (a) When an individual adopts an induced response through compliance, he tends to perform it only under conditions of *surveillance* by the influencing agent. These conditions are met if the agent is physically present, or if he is likely to find out about the individual's actions. (b) When an individual adopts an induced response through identification, he tends to perform it only under conditions of *salience* of his relationship to the agent. That is, the occurrence of the behavior will depend on the extent to which the person's relationship to the agent has been engaged in the situation. Somehow this relationship has to be brought into focus and the individual has to be acting within the particular role that is involved in the identification. This does not necessarily mean, however, that he is consciously aware of the relationship; the role can be activated without such awareness. (c) When an individual adopts an induced response through internalization, he tends to perform it under conditions of *relevance of the values* that were initially involved in the influence situation. The behavior will tend to occur whenever these values are activated by the issues under consideration in a given situation, quite regardless of surveillance or salience of the influencing agent. This does not mean, of course, that the behavior will occur every time it becomes relevant. It may be out-competed by other responses in certain situations. The probability of occurrence with a given degree of issue relevance will depend on the strength of the internalized behavior.

2. It is hypothesized that responses adopted through the

three processes will differ in terms of the conditions under which they will subsequently be abandoned or changed. (a) A response adopted through compliance will be abandoned if it is no longer perceived as the best path toward the attainment of social rewards. (b) A response adopted through identification will be abandoned if it is no longer perceived as the best path toward the maintenance or establishment of satisfying self-defining relationships. (c) A response adopted through internalization will be abandoned if it is no longer perceived as the best path toward the maximization of the individual's values.

3. Finally, it is hypothesized that responses adopted through the three processes will differ from each other along certain qualitative dimensions. These can best be summarized, perhaps, by referring to the type of behavior system in which the induced response is embedded. (a) Behavior adopted through compliance is part of a system of external demands that characterize a specific setting. In other words, it is part of the rules of conduct that an individual learns in order to get along in a particular situation or series of situations. The behavior tends to be related to the person's values only in an instrumental rather than an intrinsic way. As long as opinions, for example, remain at that level, the individual will tend to regard them as not really representative of his true beliefs. (b) Behavior adopted through identification is part of a system of expectations defining a particular role—whether this is the role of the other which he is taking over, or a role reciprocal to the other's. This behavior will be regarded by the person as representing himself, and may in fact form an important aspect of himself. It will tend to be isolated, however, from the rest of the person's values—to have little interplay with them. In extreme cases, the system in which the induced response is embedded may be encapsulated and function almost like a foreign body within the person. The induced responses here will be relatively inflexible and stereotyped. (c) Behavior adopted through internalization is part of an internal system. It is fitted into the person's basic framework of values and is congruent with it. This does not imply complete consistency: the degree of con-

sistency can vary for different individuals and different areas of behavior. It does mean, however, that there is some interplay between the new beliefs and the rest of the person's values. The new behavior can serve to modify existing beliefs and can in turn be modified by them. As a result of this interaction, behavior adopted through internalization will tend to be relatively idiosyncratic, flexible, complex, and differentiated.

Research Based on the Model

The model itself and its possible implications may be seen more clearly if I present a brief summary of the research in which it was used. This research has moved in three general directions: experimental tests of the relationships proposed by the model, application of the model to the study of personality factors in social influence, and application of the model to the analysis of a natural influence situation.

Experimental tests of the proposed distinctions between the three processes. The relationships proposed by the model can be tested by experiments in which the antecedents postulated for a given process are related to the consequents postulated for that process. The first experiment on this problem¹³ varied one of the antecedents—the source of the influencing agent's power—and observed the effects of this variation on one of the consequents—the conditions of performance of the induced response. Subjects (Negro college freshmen) were exposed to a tape-recorded interview dealing with an aspect of the Supreme Court decision on school segregation. Four versions of this communication were developed and played to different groups of subjects. The four communications contained the same message, but they differed in the way in which the communicator was introduced and presented himself at the beginning of the interview. These differences were designed to vary the source and degree of the communicator's power: in one communication the speaker was presented as possessing high means control, in the second as possessing high attractiveness, in the third

¹³ H. C. Kelman, "Compliance, Identification and Internalization: Three Processes of Attitude Change," *Journal of Conflict Resolution* 2 (1958): 51-60.

as possessing high credibility, and in the fourth (for purposes of comparison) as being low in all three of these sources of power.

The subjects filled out attitude questionnaires designed to measure the extent of their agreement with the communication. To vary the conditions of performance, we asked each subject to complete three separate questionnaires, one under conditions of salience and surveillance, one under conditions of salience of the communicator but without surveillance, and a third under conditions of nonsurveillance and nonsalience. It was predicted that attitudes induced by the communicator high in means control would tend to be expressed only under conditions of surveillance by the communicator (the mediating process here being compliance), attitudes induced by the communicator high in attractiveness would tend to be expressed only when the subject's relationship to the communicator was salient (the mediating process here being identification), and attitudes induced by the communicator high in credibility would tend to be expressed when they were relevant in content, regardless of surveillance or salience (the mediating process here being internalization). These predictions were confirmed to a most encouraging degree.

One implication of this study for the analysis of public opinion is that we can make certain predictions about the future course of a given opinion if we know something about the interpersonal circumstances under which it was formed. An interview might reveal the predominant dimensions in terms of which the respondent perceives those individuals and groups to whom he traces the opinion in question. For example, does he see them primarily as potential sources of approval and disapproval? Or as potential reference points for his self-definition? Or as potential sources of information relevant to his own concern with reality-testing and value maximization? From the answers to these questions we should be able to predict the future conditions under which this opinion is likely to come into play.

The study also suggests possible "diagnostic" devices that would make it possible to infer the process by which a particu-

lar opinion was adopted and hence the level at which it is held. If, for example, an opinion is expressed only in the presence of certain crucial individuals, one can assume that it is probably based on compliance and one can make certain further inferences on that basis. In other words, by observing the "conditions of performance of the induced response" (one of the consequents in our model), we can deduce the process on which this response is based.

It would, of course, be considerably easier and safer to make such inferences if several diagnostic criteria were available. It would be useful, therefore, to derive—from the list of consequents postulated by the model—further indicators in terms of which compliance-based, identification-based, and internalized opinions can be distinguished from one another, and to test the validity of these indicators. This is particularly true for identification and internalization. Since both of these processes, presumably, produce changes in "private belief," it is difficult to pin down the distinction between opinions based on them. There is a need, therefore, to develop a number of indicators that can capture the qualitative differences in the nature of opinions produced by these two processes, subtle though these differences may be. A second experiment addressed itself to this problem.¹⁴

The experimental situation, again, involved the use of tape-recorded communications. Three versions of the communication were used, each presented to a different group of college students. In each of the communications a novel program of science education was described and the rationale behind it was outlined. The basic message was identical in all cases, but the communications differed in terms of certain additional information that was included in order to produce different orientations. In one communication (*role-orientation* condition) the additional information was designed to spell out the implications of the induced opinions for the subject's relationship to certain important reference groups. Positive reference groups

¹⁴ H. C. Kelman, "Effects of Role-Orientation and Value-Orientation on the Nature of Attitude Change," paper read at the meetings of the Eastern Psychological Association, New York, 1960.

were associated with acceptance of the message, and—in a rather dramatic way—negative reference groups were associated with opposition to it. The intention here was to create two of the postulated antecedents for *identification*: a concern with the social anchorage of one's opinions, and a delineation of the requirements for maintaining the desired relationship to one's reference groups (see Table). In the second communication (*value-orientation* condition) the additional information was designed to spell out the implications of the induced opinions for an important value—personal responsibility for the consequences of one's actions. The communication argued that acceptance of the message would tend to maximize this value. The intention here was to create two of the postulated antecedents of *internalization*: a concern with the value congruence of one's opinions, and a reorganization of one's conception of means-ends relationships. The third communication was introduced for purposes of comparison and contained only the basic message.

On the basis of the theoretical model it was predicted that the nature of the attitude changes produced by the two experimental communications would differ. Role orientation would presumably produce the consequences hypothesized for identification, while value orientation would produce the consequences hypothesized for internalization. A number of measurement situations were devised to test these predictions. (1) In each group, half the subjects completed attitude questionnaires immediately after the communication, under conditions of salience, and half completed them a few weeks later, under conditions of nonsalience. As predicted, there was a significant difference between these two conditions of measurement for the role-orientation group but not for the value-orientation group. (2) The generalization of the induced attitudes to other issues involving the same values, and to other situations involving similar action alternatives, was measured. The prediction that the value-orientation group would show more generalization than the role-orientation group on the value dimension tended to be confirmed. The prediction that the reverse would be true for generalization along the action dimension was not

upheld. (3) Flexibility of the induced attitudes was assessed by asking subjects to describe their doubts and qualifications. As predicted, the value-orientation group scored significantly higher on this index. (4) Complexity of the induced attitudes was assessed some weeks after the communication by asking subjects to list the things they would want to take into account in developing a new science education program. The total number of items listed was greater for the role-orientation group, but the number of items showing an awareness of relevant issues (as rated by a naïve judge) was clearly greater in the value-orientation group. (5) Half the subjects in each group were exposed to a countercommunication presenting a new consensus, the other half to a countercommunication presenting new arguments. It was predicted that the role-orientation group would be relatively more affected by the first type of countercommunication, and the value-orientation group by the second. The predicted pattern emerged, though it fell short of statistical significance.

The results of this study are not entirely unambiguous. They are sufficiently strong, however, to suggest that it should be possible to develop a number of criteria by which identification-based and internalized attitudes can be distinguished from one another. On the basis of such distinctions, one can then make certain inferences about the meaning of these attitudes and further predictions about their future course.

The relation between personality factors and social influence. This research starts with the assumption that the specific personality variables that are related to the acceptance of influence will depend on the particular process of influence involved. There is a further assumption that relationships depend on the type of influence situation to which the person is exposed. In other words, the concern is with exploring the specific personality variables that predispose individuals to engage in each of the three processes, given certain situational forces.

In the first study of this problem ¹⁵ we were interested in the

¹⁵ H. C. Kelman and J. Cohler, "Reactions to Persuasive Communication as a Function of Cognitive Needs and Styles," paper read at the meetings of the Eastern Psychological Association, Atlantic City, 1959.

relationship between one type of personality variable—cognitive needs and styles—and the process of internalization. We wanted to study this relationship in a situation in which people are exposed to new information that challenges their existing beliefs and assumptions. This is a situation in which at least some people are likely to reexamine their beliefs and—if they find them to be incongruent with their values in the light of the new information—they are likely to change them. A change under these particular motivational conditions would presumably take the form of internalization.

It was proposed that people who are high in what might be called the *need for cognitive clarity* would react more strongly to a situation of this type. They would be made uncomfortable by the incongruity produced by such a situation and the challenge it presented to their cognitive structures. The *nature* of their reaction, however, may differ. Some people may react to the challenge by changing their beliefs, while others may react by resisting change. Which of these directions an individual would be likely to follow would depend on his characteristic *cognitive style*. A person who typically reacts to ambiguity by seeking clarification and trying to gain understanding (a “clarifier”) would be likely to open himself to the challenging information and perhaps to reorganize his beliefs as a consequence. A person who typically reacts to ambiguity defensively, by simplifying his environment and keeping out disturbing elements (a “simplifier”), would be likely to avoid the challenging information.

Measures of cognitive need and cognitive style were obtained on a group of college students who were then exposed to a persuasive communication that presented some challenging information about American education. Change in attitudes with respect to the message of the communication was measured on two occasions for each subject: immediately after the communication, under conditions of salience, and six weeks later, under conditions of nonsalience.

We predicted that, among people high in need for cognitive clarity, those whose characteristic style is clarification would be the most likely to manifest attitude change in the induced

direction, while those whose characteristic style is simplification would be the most likely to manifest resistance to change and possibly even negative change. This difference should be especially marked under conditions of nonsalience, which are the conditions necessary for a reasonable test of internalization. Among the people who are low in need for cognitive clarity, it was predicted that cognitive style would be unlikely to produce consistent differences since they are less motivated to deal with the ambiguity that the challenging information has created.

The results clearly supported these predictions. High-need clarifiers showed more change than high-need simplifiers (who, in fact, changed in the negative direction). This difference was small under conditions of salience, but became significant under conditions of nonsalience—suggesting that the difference between clarifiers and simplifiers is due to a difference in their tendency to internalize. Among low-need subjects, no consistent differences between the two style groups emerged.

This study suggests that one can gain a greater understanding of the structure of an individual's opinions on a particular issue by exploring relevant personality dimensions. In the present case we have seen that, for some of the subjects (those concerned with cognitive clarity), the opinions that emerge represent at least in part their particular solution to the dilemma created by incongruous information. In studies that are now under way we are exploring other personality dimensions that are theoretically related to tendencies to comply and identify. If our hypotheses are confirmed in these studies, they will point to other ways in which emerging opinions may fit into an individual's personality system. Opinions may, for example, represent partial solutions to the dilemmas created by unfavorable evaluations from others or by finding oneself deviating from the group. Since these relationships between opinions and personality variables are tied to the three processes of influence in the present model, certain predictions about the future course of the opinions for different individuals can be readily derived.

The application of the model to the analysis of a natural influence situation. We are currently engaged in an extensive study of Scandinavian students who have spent a year of study

or work in the United States.¹⁶ We are interested in the effects of their stay here on their self-images in three areas: nationality, profession, and interpersonal relations. Our emphasis is on learning about the processes by which changes in the self-image come about or, conversely, the processes by which the person's existing image maintains itself in the face of new experiences. Our subjects were questioned at the beginning of their stay in the United States and at the end of their stay, and once again a year after their return home.

This study was not designed as a direct test of certain specific hypotheses about the three processes of influence. In this kind of rich field situation it seemed more sensible to allow the data to point the way and to be open to different kinds of conceptualizations demanded by the nature of the material. The model of influence did, however, enter into the formulation of the problem and the development of the schedules and is now entering into the analysis of the data.

In a preliminary analysis of some of our intensive case material, for example, we found it useful to differentiate four patterns of reaction to the American experience which may affect various aspects of the self-image. (1) An individual may change his self-image by a reorganization of its internal structure; here we would speak of a change by means of the process of *internalization*. (2) His self-image may be changed by a reshaping of the social relationships in which this image is anchored; here we would speak of a change by means of *identification*. (3) The individual may focus on the internal structure of the self-image but maintain it essentially in its original form; here we would speak of the process of *confirmation*. Finally, (4) he may maintain his self-image through a focus on its original social anchorage; here maintenance by the process of *resistance* would be involved. We have related these four patterns to a number of variables in a very tentative way, but the analysis will have to progress considerably farther before we can assess the useful-

¹⁶ Lotte Bailyn and H. C. Kelman. "The Effects of a Year's Experience in America on the Self-Image of Scandinavians: Report of Research in Progress." paper read at the meetings of the American Psychological Association, Cincinnati, 1959.

ness of this scheme. It is my hope that this kind of analysis will give us a better understanding of the attitudes and images that a visitor takes away from his visit to a foreign country and will allow us to make some predictions about the subsequent history of these attitudes and images. Some of these predictions we will be able to check out on the basis of our post-return data.

Conclusion

There is enough evidence to suggest that the distinction between compliance, identification, and internalization is valid, even though it has certainly not been established in all its details. The specification of distinct antecedents and consequents for each of the processes has generated a number of hypotheses which have met the experimental test. It seems reasonable to conclude, therefore, that this model may be useful in the analysis of various influence situations and the resulting opinion changes. It should be particularly germane whenever one is concerned with the quality and durability of changes and with the motivational conditions that produced them.

I have also attempted to show the implications of this model for the analysis of public opinion. By tying together certain antecedents of influence with certain of its consequents, it enables us to infer the motivations underlying a particular opinion from a knowledge of its manifestations, and to predict the future course of an opinion from a knowledge of the conditions under which it was formed. Needless to say, the usefulness of the model in this respect is limited, not only because it is still in an early stage of development but also because of the inherent complexity of the inferences involved. Yet it does suggest an approach to the problem of meaning in the analysis of public opinion data.

DORWIN CARTWRIGHT

*Some Principles of Mass Persuasion:
Selected Findings of Research
on the Sale of U.S. War Bonds*

During World War II the U.S. government initiated a number of mass persuasion campaigns aimed at inducing the public to buy savings bonds. Since each campaign brought to bear unusually concentrated social pressures to buy war bonds, over relatively short periods of time, researchers were provided an excellent opportunity to gather data on how mass communications function to influence mass behavior. In the following pages Dorwin Cartwright uses the findings of the war bond research to illustrate that, in order to influence behavior, communications must activate three basic psychological processes by creating a particular cognitive structure, a particular motivational structure, and a particular behavioral structure. One of the more important points to be drawn from this article is that all three processes are essential to the influence process. Too often, communication campaigns concentrate heavily on the first process, give less consideration to the second, and all but ignore the third. The specific principles with which Cartwright elaborates each of the three processes provide an excellent blueprint for both the communication researcher and the mass communication practitioner. Dr. Cartwright is a member of the Research Center for Group Dynamics and a professor of psychology at the University of Michigan. His article is reprinted, by permission of the author and the publisher, from *Human Relations*, where it was published and copyrighted in 1949.

AMONG THE MANY TECHNOLOGICAL ADVANCES of the past century that have produced changes in social organization, the development of the mass media of communication promises to be the most far-reaching. Techniques making possible the instantaneous transmission of visual and auditory messages around the world have greatly heightened the interdependence among ever larger numbers of people. It has now become possible from one source to influence the thinking and behavior of hundreds of millions of people. One person can now address at

one time a major portion of the world's population to educate, entertain, incite, or allay fears. Only psychological and social factors make it impossible at the present time to assemble into a single audience virtually the entire population of the world.

This heightened interdependence of people means that the possibilities of mobilizing mass social action have been greatly increased. It is conceivable that one persuasive person could, through the use of mass media, bend the world's population to his will. Writers have described such a state of affairs, and demagogues have tried to create one, but nothing so drastic has yet even been approached.

Perhaps because of fears aroused by such a possibility, there has been a tendency to exaggerate both the possible evils of mass persuasion and its powers to influence behavior. An examination of the actual effectiveness of campaigns of mass persuasion may contribute to objective thinking.

In the course of a year in the United States alone, literally scores of organizations make use of a significant part of the mass media in order to carry on some campaign. Only the financial cost of using the media seems to limit their use for these purposes. One need mention but a few examples to suggest an almost endless list. The financing of social welfare agencies throughout the United States, for instance, is accomplished largely through annual campaigns designed to enlist contributions from the general public. Political campaigns are an essential part of any democratic political system. During the war the various governments relied upon campaigns to organize public behavior behind their national war efforts. And campaigns are currently underway to induce people to drive in such a way as to reduce traffic accidents, to eat the kinds of food that will create better standards of health, to take steps necessary to cure cancer, to contribute to the endowment of educational institutions, to participate in food production programs of the government, to support or oppose specific legislation, etc. Most of the activities of businesses intended to promote the sale of goods by means of advertising should be included in this list.

Despite the great reliance placed upon campaigns by organi-

zations of all types, it is nonetheless evident that campaigns do not necessarily succeed in inducing desired behavior among any substantial proportion of the population. As research techniques have become available to evaluate the actual effects of campaigns, it has become a rather common experience for organizations and agencies to spend substantial sums of money on such activities, only to find from objective appraisals that little perceptible effect was accomplished. It is not yet possible on the basis of research to state exactly how large a campaign of what kind is required to produce a given amount of influence on mass behavior, but evidence is accumulating to indicate that significant changes in behavior as a result of campaigns are rather the exception than the rule.

During the recent war there arose an opportunity to collect some data relevant to this problem. The U.S. government undertook, as a part of its inflation control program, to sell savings bonds to the population by means of campaigns. Regular research projects, undertaken to make these efforts as effective and efficient as possible, provide some data concerning the effects produced by campaigns of various kinds and magnitudes. Since the major part of the effort going into these campaigns was contributed voluntarily, it was not possible to get a precise measure of their magnitude even in terms of the money value of their costs, but fairly good estimates were possible. Some illustrative findings may be cited. During the second war loan it was estimated that slightly more than \$12,000,000 worth of measurable advertising was displayed through the various mass media. In addition to this there were countless rallies, meetings, editorials, feature articles, and the like. In other words, during a period of approximately two months there was developed an unusually concentrated campaign of social pressure to induce people to buy war bonds. What were the measurable effects? A national survey conducted after the campaign found that 62 percent of the adult population could recognize the name of the drive and that 20 percent of those receiving income had bought bonds for the drive. Comparable figures for the seventh war loan provide an indication of the effects of an even larger effort. During this campaign over \$42,000,000

worth of measurable advertising was displayed; now 94 percent of the adult population could recognize the name of the drive, and 40 percent of the income receivers bought bonds for the drive.

There are of course many other effects of such campaigns in addition to those listed here, and comparable data are needed from campaigns of a different sort before safe generalizations can be made, but it is reasonable to conclude from these data that even the most efficiently conducted campaigns do not produce major effects upon mass behavior cheaply nor without considerable effort.

We may ask why it is that campaigns seem to require so much effort. One obvious variable influencing the outcome of campaigns is the relation between the behavior encouraged by the campaign and the behavior which the population desires. It is easier to get people to do something they want to do than something they oppose. But this seems to be only part of the story. Another reason that campaigns may fail to be fully influential is that the techniques for using the media are not always the most effective. Research on readership, listening behavior, and the like shows that some techniques, *qua* techniques, are better than others in attracting attention, creating favorable attitudes toward the media, etc. But again the evidence available indicates that the amount of improvement in the effectiveness of a medium that can be obtained by refinement of techniques is limited.

A more fruitful approach to this problem would seem to lie in an analysis of the psychological processes involved in the induction of behavior by an outside agent. What happens psychologically when someone attempts to influence the behavior of another person? The answer, in broad outline, may be described as follows: To influence behavior, a chain of processes must be initiated within the person. These processes are complex and interrelated, but in broad terms they may be characterized as (1) creating a particular cognitive structure, (2) creating a particular motivational structure, and (3) creating a particular behavioral (action) structure. In other words, behavior is determined by the beliefs, opinions, and "facts" a person

possesses; by the needs, goals, and values he has; and by the momentary control held over his behavior by given features of his cognitive and motivational structure. To influence behavior "from the outside" requires the ability to influence these determinants in a particular way.

It seems to be a characteristic of most campaigns that they start strongly with the first process, do considerably less with the second, and only lightly touch upon the third. To the extent that the campaign is intended to influence behavior and not simply to "educate," the third process is essential.

Let us now elaborate these principles in more detail, calling upon the data concerning the sale of war bonds to provide illustrations and documentation.

Creating a Particular Cognitive Structure

It is considered a truism by virtually all psychologists that a person's behavior is guided by his perception of the world in which he lives. Action is taken on the basis of a person's view of the "facts" of the situation. Alternatives are chosen according to beliefs about "what leads to what." The content and relationships among parts of a person's psychological world may be called his cognitive structure, and it may be stated that a person's behavior is a function of the nature of his cognitive structure. It follows from this formulation that one way to change a person's behavior is to modify his cognitive structure. Certain kinds of changes of behavior, moreover, seem to be possible only if certain changes of cognitive structure take place. This principle applies to all efforts to influence behavior, whether in a face-to-face situation or by communication through a distance.

The modification of cognitive structure in individuals by means of the mass media has several prerequisites. These may be stated in the form of principles.

1. *The "message" (i.e., information, facts, etc.), must reach the sense organs of the persons who are to be influenced.*

Stated in such a bald fashion this principle seems obvious

enough. Yet it has practical consequences which are not so commonly recognized. Research upon readership and listenership has made it clear that putting a message on a national radio network or in a national periodical by no means assures that it will actually reach the sense organs of a significant proportion of the population. Only a fraction of the population listens to the radio at any given time, and quite small proportions see a given issue of a periodical. For the most part, people choose the media and thus the messages which are to reach them at any given time. They decide whether they will listen to the radio, read a magazine, go to the movies, or attend a political rally. There is no guarantee, therefore, that providing the opportunity for mass stimulation of the entire population will result in the actual stimulation of any large segment of it.

1a. Total stimulus situations are selected or rejected on the basis of an impression of their general characteristics.

Although the factors determining the way people select stimulus situations are only partially known, there appear to be broad categories which people employ in characterizing stimulus situations, such as entertainment, news, politics, advertising, and the like. Whether or not a person will choose one or another stimulus situation seems to depend upon his reaction to the general category. An illustration of this process is provided by research on the war bond program. Early in the war the Treasury Department distributed through the mail a pamphlet about bonds to every household in most parts of the country. As a test of its effectiveness a sample survey was conducted in Baltimore, Maryland, to determine how many people had read the pamphlet. Although this pamphlet had been placed in the mailbox of nearly every family in the city, it was found that 83 percent of those interviewed did not remember having seen it, even after being shown a copy of the publication and being allowed to examine its contents. Of the 17 percent who recalled having received a copy, about one-third reported that they had not looked through it at all and were able to recognize only the front cover. This means, then, that only about 11 percent of the adult population had read any part of

the pamphlet. In attempting to learn why so many people failed to read the pamphlet after receiving it, it was found that many people had confused the pamphlet with other publications of similar format, such as Sunday newspaper supplements or other advertising matter. A number of people asserted that they had thrown it away because they had thought it was a commercial advertising leaflet. Another group of people took it to be a children's publication and gave it to their children without reading it themselves. What happened, then, was that upon the basis of a first general impression people categorized the pamphlet as something they did not care to read and disposed of it without further scrutiny.

1b. The categories employed by a person in characterizing stimulus situations tend to protect him from unwanted changes in his cognitive structure.

Apparently one common consequence of this categorization of stimulus situations is the protection of the person from stimuli which might produce unwanted changes in his cognitive structure. Illustrative of this principle are the tendencies of people to read newspapers whose editorial policies tend to agree with their own and to listen predominantly to political candidates who belong to their own party. Further evidence may be derived from the wartime research program for the Treasury. In the spring of 1944 Treasury Department officials were exploring the possibilities of using documentary movies in order to heighten citizen identification with the war effort. As an experiment to determine the effects of one particular movie, a week's showing was organized in a public auditorium in Bridgeport, Connecticut. Tickets were distributed widely throughout the population by labor unions, employers, civil defense organizations, nationality groups, civic organizations, city employees, and many others. During the week approximately 5 percent of the adult population of Bridgeport came to the movie. As a part of the evaluation of the effects of the movie on people's interest in participating in voluntary civilian war activities, interviews were conducted with a random sample of those attending and with a control sample of people who

did not attend the movie. One of the most striking findings of this study revealed that the people who attended the movie were the ones whose behavior was already closest to that encouraged by the movie. For example, approximately 40 percent of those attending the movie had offered blood to the Red Cross while only 20 percent of those not attending had done so. Other measures of activity in community affairs revealed similar differences, and there was evidence that those attending the movie came disproportionately from the upper income levels of the population. In other words, the way in which the appeal to attend the movie was categorized by the public made it less attractive to those very people whom the movie was designed to influence. Had the movie been shown in commercial theaters simply as "entertainment," it might not have selected such a special group of people.

2. Having reached the sense organs, the message must be accepted as a part of the person's cognitive structure.

Even after a message reaches the sense organs of an individual, there are many reasons that it may not be incorporated into his cognitive structure. Everyone knows that there is often a considerable difference between telling a person something and having him pay attention to it, remember it, or accept it as true. In general the same factors operate to facilitate or inhibit the acceptance of a given message that influence the selection of stimulation from the media. We may therefore note the following principles.

2a. Once a given message is received it will tend to be accepted or rejected on the basis of more general categories to which it appears to belong.

2b. The categories employed by a person in characterizing messages tend to protect him from unwanted changes in his cognitive structure.

Anyone desiring to influence the behavior of others must keep constantly in mind a very simple and obvious fact, namely, that everyone, after the earliest stages of infancy, pos-

sesses a remarkably stable cognitive structure upon which he depends for a satisfactory adjustment to his environment. Any effort to change behavior through a modification of this cognitive structure must overcome the forces tending to maintain the present structure. Only when a given cognitive structure seems to the person to be unsatisfactory for his adjustment is he likely readily to receive influences designed to change that structure. It is instructive to examine what happens when an item is presented which is at variance with the cognitive structure. When such a situation occurs a disequilibrium is established which must be removed in some fashion. Characteristically one or more of three things seem to happen.

2c. When a message is inconsistent with a person's prevailing cognitive structure it will either (a) be rejected, (b) be distorted so as to fit, or (c) produce changes in the cognitive structure.

Which of these outcomes will actually occur depends upon the relative strength of the forces maintaining the cognitive structure and of those carried by the new message. It will not be possible to explore here the factors determining the magnitude of these forces, but it may be indicated that the forces maintaining a cognitive structure are ordinarily of a very great magnitude. Evidence from the war bond research may be cited to illustrate two points of relevance here. First, it will be seen that, despite continued efforts throughout the war to get people to understand some of the major purposes the government had for its war bond program, there was little actual change in people's beliefs. This is evidence of the stability of cognitive structure and its resistance to change. Second, it will be evident that this stability was maintained by people selecting from the great variety of promotional material developed for the campaigns those features which conformed to their existing cognitive structure and rejecting those which deviated.

After each of the war loans a sample of the population was asked: "Why do you think the government is anxious to get people to buy bonds?" The specific answers given by respondents to this question have been grouped under a few major

headings in Table 1. It will be seen how little the answers changed over a period of thirty months of war bond publicity.

The stability of the percentages in the table is most remarkable. With minor exceptions the variability does not exceed that expected simply from repeated samplings of a population with constant characteristics. Since the same individuals were not interviewed in the various studies it is not possible to determine with certainty that individuals were not shifting from one category to another from one time to the next, but the most likely hypothesis would seem to be that there was remarkably little change throughout the war in people's views as to why the government was wanting to sell bonds.

This stability was maintained in the face of a tremendous barrage of promotion through all the media of communication. Examination of the content of this promotion makes it clear that no single explanation of the government's reasons was universally pushed, and it is reasonable to suppose that there was a rough correspondence between the percentage of the publicity devoted to any given reason and the number of people already holding that reason. But the remarkable fact remains that, with

TABLE 1. REASONS ATTRIBUTED TO GOVERNMENT FOR WANTING TO SELL BONDS

Reasons	Second Loan <i>April</i> 1943 %	Third Loan <i>Sept.</i> 1943 %	Fourth Loan <i>Jan.</i> 1944 %	Fifth Loan <i>June</i> 1944 %	Sixth Loan <i>Nov.</i> 1944 %	Seventh Loan <i>June</i> 1945 %
To finance the war, to win the war, to help soldiers	65	75	65	65	67	68
To prevent inflation	14	11	14	15	15	14
To get people to save	4	4	7	8	7	10
To provide postwar security	4	2	2	3	2	3
Other reasons	13	8	12	9	9	5
	100	100	100	100	100	100
Number of interviews	1,358	1,583	1,441	1,925	2,148	2,263

the great array of reasons being publicized, people seemed to keep the ones they arrived at in the very beginning of the war.

In the course of the research program considerable attention was given to the nature of popular thinking about the functioning of the economy and the role of war bonds in the prevention of inflation. From this analysis it became clear, for example, why the promotion designed to explain the government's interest in bond sales as a means of inflation control did not succeed in changing popular thinking. It became apparent that for many people war finance was seen simply as the collection of dollars by Uncle Sam which were then paid by him to manufacturers of war goods. If Uncle Sam sold the bonds, he could buy equipment; if he did not sell them, he could not get the supplies. Asked directly whether failure to sell enough bonds would cause a shortage of military equipment, 49 percent of those interviewed after the fourth loan said that it would. With such a conception of the nature of the economy is it not surprising that, when asked whether they thought buying bonds would help keep prices down, 54 percent either asserted directly that bond purchases had no effect on prices or said that they could not see any relation between the two. Nor is it surprising that during the war there was a slight increase in this percentage, since a number of people noted that even though bonds were being sold in large quantities prices were continuing to rise.

From this and similar evidence the conclusion seems warranted that people succeeded in maintaining an early established cognitive structure by selecting from the war bond promotion those items which conformed to that structure and by ignoring items deviating from it.

Numerous examples of the distortion of messages to make them agree with existing beliefs could be cited, but perhaps the most dramatic are those related to the conviction held by a minority of the population that the government would not redeem the bonds. Whenever a change of procedure in the redemption of bonds was instituted, rumors cropped up among these people to the effect that the new change was a step toward "freezing" bonds. At one point during the war a group of

enthusiastic citizens (probably as a publicity stunt) conducted a bonfire in which they burned their bonds as a gesture to indicate their willingness to give money to the government for the war. This event stimulated rumors among those distrusting the government's intention to repay that the bonds were no good and that people were burning them because they were worthless.

To summarize the evidence presented up to this point, it is clear that changes in cognitive structure cannot be assured simply by guaranteeing wide coverage of the media of communication. By selecting the stimuli from the media which they will allow to reach their sense organs and by rejecting or distorting messages that deviate too much from existing cognitive structures, people manage to resist much of the effort made to change their thinking by techniques of mass persuasion. To the extent that changes in behavior are dependent upon changes of cognitive structure, they, at the same time, resist efforts to modify their usual manner of behavior.

Creating a Particular Motivational Structure

We have now explored some of the implications of the notion that behavior is guided by a person's cognitive structure. For a satisfactory analysis of the process of social induction of behavior, however, it is necessary to examine a bit further what it is that energizes behavior. As a general statement it may be said that personal needs provide the energy for behavior and express themselves through the setting up of goals in the person's cognitive structure. That is to say, certain activities (like eating, going to the movies, running for Congress, etc.) become attractive when corresponding needs are activated, and the amount of energy that will be devoted to these activities depends upon the strength of the need (i.e., the level of need tension). It should be noted further that goals have a location in the cognitive structure so that for a given individual some activities are seen as leading to the satisfaction of certain needs and others are seen as unrelated to such satisfaction or even

leading away from it. Thus, for one person joining a union may be seen as a path leading to economic security, while for another being nice to the boss may be seen as the path toward the same goal, with joining the union being in exactly the opposite direction.

It follows from these general observations about the nature of human motivation that efforts to influence the behavior of another person must attempt either to modify needs (and goals) or to change the person's motivational structure as to which activities lead to which goals. This means that a person can be induced to do voluntarily something that he would otherwise not do only if a need can be established for which this action is a goal or if the action can be made to be seen as a path to an existing goal. Little is known at the present time about the establishment of needs, but it appears unlikely that any single campaign via the mass media can actually establish new needs. Whether or not this feat is possible, the following principle may nevertheless be stated.

3. *To induce a given action by mass persuasion, this action must be seen by the person as a path to some goal that he has.*

When people were asked during the war why they were buying bonds, they gave answers that could readily be interpreted in terms of the motivational principles outlined here. The most common reasons were related to the desire to win the war. People said, in essence, though they phrased it in many ways, "I want to help win the war, and buying war bonds is one way I can help." Stated reasons of this type were the following (percentages are given to indicate the proportion of the adult population giving them after the seventh loan): (a) because the country needs the money to pay for the war (64 percent); (b) to help the boys, to bring them back (16 percent); (c) to get the war over sooner (6 percent).

Another goal for which buying bonds was seen as a path may be loosely defined as "personal economic security." People who gave reasons of this type said in essence, "I want to provide economic security for myself and family, and buying war bonds is one way I can achieve this goal." The most common of these

reasons given after the seventh loan were: (a) to save for some indefinite personal use in the future (44 percent); (b) to have reserves in case of a post-war depression (5 percent); (c) because bonds are a good investment (24 percent).

A third rather common type of goal was "wanting to be a good citizen." Reasons related to this goal tended to be stated in terms of the government's needs or objectives. To the extent that the government's objectives were seen as also providing satisfaction of personal financial needs, these reasons could also be classified under the previous heading. The more frequent of these reasons were: (a) to help prevent inflation (14 percent); (b) because the government wants people to save (10 percent); (c) to prevent a post-war depression (1 percent).

Undoubtedly many people had other personal goals for which buying bonds was seen as a path. It appears, for example, that some people saw the buying of bonds at public rallies as a means of gaining prestige. At first glance it would seem that the number of goals that could be made to appear attainable through the purchase of bonds would be almost limitless. Further scrutiny of the facts, however, indicates that there were actually severe limitations on the kinds of connections that could be established between bond-buying and personal goals. Unless people could see something in the nature of buying bonds that made this act appear reasonably a path to a given goal all the power of mass persuasion that could be mobilized could not get the connection accepted.

3a. A given action will be accepted as a path to a goal only if the connections fit the person's larger cognitive structure.

As documentation of this principle it is necessary only to refer again to the fact that, despite efforts to explain the relation between buying bonds and inflation control, over half of the population still denied that there was such a relationship because it did not fit into their general understanding of the nature of the economy. Similarly, those people who believed that the government would not repay the bonds could not be induced to believe that buying bonds would provide them with personal economic security after the war.

3b. *The more goals which are seen as attainable by a single path, the more likely it is that a person will take that path.*

It is, of course, possible for a given action to be seen as leading simultaneously to more than one goal. When such a situation exists, the forces directed toward these various goals will all assume the direction of the one action which is the path common to them all. It is to be expected, then, that making a given action appear as leading to several goals will increase the likelihood that that action will be chosen. In persuading people to buy war bonds, this meant that the more reasons they could be led to see for buying, the more likely they should be to buy. Evidence from the research program consistently supported this conclusion. Consider the findings of the survey after the seventh loan (Table 2). It is seen that people who saw more than one type of reason for buying bonds were much more likely to buy, whether solicited or not, than were those who had only one type of reason. In order to be certain that differences in income among those giving different numbers of reasons do not produce these results, it is necessary to conduct this analysis separately within restricted income ranges. When this procedure is followed, it is found that at every income level people who gave more than one type of reason were more likely to buy than were those who mentioned only one type.

TABLE 2. THE RELATION OF THE NUMBER OF REASONS MENTIONED TO BUYING BONDS IN THE SEVENTH WAR LOAN

Types of Reasons Mentioned	Proportion buying for drive of those:	
	Personally asked to buy %	Not asked to buy %
Patriotic, personal financial, and national financial	65	35
Patriotic and personal financial <i>or</i> Patriotic and national financial	57	22
Patriotic only	44	9
Number of interviews	1,232	1,104

3c. *If an action is seen as not leading to a desired goal or as leading to an undesired end, it will not be chosen.*

3d. *If an action is seen as leading to a desired goal, it will tend not to be chosen to the extent that easier, cheaper, or otherwise more desirable actions are also seen as leading to the same goal.*

These two principles are simply elaborations of the general motivational scheme already outlined. They point, however, to exceedingly important practical implications for anyone desiring to influence behavior by mass persuasion. Much of the psychological warfare of competing propagandists or of competing advertising programs is concerned with these principles. In such competition much effort is devoted to the objective of showing how one's own proposed course of action leads to a desired goal, while the action proposed by the competitor does not lead to a desired goal or actually leads to an undesired end. The efforts of dictators to monopolize the channels of communication stem largely from the realization that competitors may offer more acceptable paths to accepted goals.

Those people who during the war believed that the government would not repay the bonds may be cited to illustrate principle (3c). For these people, "buying bonds" was perceived as leading to "losing my money." Needless to say, it was found that these people resisted efforts to get them to buy bonds and were quite ready to redeem their bonds if they were induced to purchase them. In order to make willing bond-buyers out of these people, it was necessary to change their motivational structure in regard to the consequences seen to be connected with the act of buying bonds. Examples of the competition of paths to the same goal may also be found in the war bond campaigns. People who chose to invest their money in something more profitable than bonds were choosing a path to economic gain which appeared to be better than bonds. The following list of the more common reasons given for not buying bonds will be seen to illustrate the operation of both of these principles: bonds may not be redeemed; other investments are safer; bonds aren't liquid enough; bonds give less return than other

investments; bonds have too long a maturity period; bonds may be no good because we might lose the war; bonds will be worthless because of inflation; bonds are not necessary for victory; bonds prolong the war; savings should be kept in several forms; owning bonds gives the Government a record of my savings.

The analysis presented in this and the preceding sections specifies some of the requirements for campaigns designed to influence behavior. In brief, we have seen that a campaign must reach the sense organs with messages, that these messages must be of such a nature as to be accepted into existing cognitive structures, and that proposed courses of action must be seen as leading to desired goals. It might appear that, if these requirements were met, a campaign would succeed in inducing desired changes of behavior. The evidence indicates, however, that a further requirement exists.

Creating a Particular Behavioral Structure

The phrase "good intentions" suggests the nature of this further requirement. It is quite possible for a person to have a given cognitive and motivational structure for a long period of time without its ever actually gaining control of his behavior. There are certain motivational systems, like those of hunger or thirst, which gain control of a person's action periodically because of a heightened discomfort that arises and persists until action is taken. There are, however, other systems, much more commonly those with which campaigns of mass persuasion deal, which carry with them no insistent prod to action within any clear limitation of time. To the extent that a campaign attempts to induce action in regard to systems of this latter type, it must be designed to deal specifically with this problem.

4. To induce a given action, an appropriate cognitive and motivational system must gain control of the person's behavior at a particular point in time.

Needless to say, a person's behavior is at all times under the control of some motivational system, and the problem of induc-

ing a given action is that of getting a particular cognitive and motivational structure in control of behavior at some specific point in time. The competition among various structures for the control of behavior is often very great. When a person is asked why he has not actually done a particular thing that he seemingly had accepted as desirable, he may answer that he did not have the time, energy, or financial resources. Such a statement is equivalent to saying that other motivational systems have maintained control of his behavior to such an extent that they monopolized his time and resources.

In selling war bonds this type of competition was most evident. Following each of the war loan drives a sample of those not buying bonds were asked their reasons for not buying. From one-half to three-quarters of these people replied that they "could not afford to buy bonds during the drive." This answer was, of course, a socially acceptable way of excusing oneself for not having submitted to social pressure, but in most instances it also reflected the fact that other motivational systems (such as those related to the needs for food, shelter, recreation, social status, etc.) had remained in control of behavior throughout the period of the drive. Most of these people held quite favorable attitudes toward bonds, accepted the desirability of their owning bonds, and agreed that buying bonds was a patriotic act. The problem of getting them actually to buy during a campaign consisted, therefore, not so much of creating favorable cognitive and motivational structures as of getting those structures in control of behavior at some specific point in time during the drive.

4a. The more specifically defined the path of action to a goal (in an accepted motivational structure), the more likely it is that the structure will gain control of behavior.

4b. The more specifically a path of action is located in time, the more likely it is that the structure will gain control of behavior.

Examination of a number of campaigns of mass persuasion will reveal that quite commonly the course of action being en-

couraged is described in relatively general terms. It is rare that the proposed action is described in concrete detail or given a precise location in time. There are, of course, good reasons for couching the language of a campaign of mass persuasion in general terms: circumstances vary greatly among people in the general population, so that a specific statement may not apply realistically to all and, if a statement is made too specific, it can more easily be rejected. But despite these difficulties, the fact seems well documented that, unless a proposed action is defined quite specifically; it is probable that it will not actually be carried out in behavior, even though it has been accepted as desirable.

The experience of the second war loan is especially illuminating in this connection. As we have already seen, more than \$12,000,000 worth of promotion was put into this campaign. Analysis of its content, however, disclosed that the major appeal to action was expressed in the phrase, "Buy war bonds." Interviews after the campaign revealed that this statement was sufficiently broad for people to accept the desirability of the action without feeling any pressure actually to buy bonds during the time of the campaign. In the interviews many people said in effect, "I agree completely that people should buy bonds; in fact I own quite a number myself." When asked why they had not bought during the drive, many people indicated their belief that they had conformed completely with the requests of the publicity "to buy bonds," even though they had not purchased any during the campaign.

As a result of this type of analysis of the second loan, Treasury officials developed quite a different campaign for the third loan. In this campaign the major appeal to action was phrased, "Buy an *extra* bond for the third war loan." In addition, an individual quota of a \$100 bond was given emphasis, and other devices were used to make it clear that an extra purchase was being requested during a specified period of time. From the research following the third drive it became abundantly clear that the revised promotion had been much more effective. It was found, for example, that the number of people asserting that they had not bought "because I am doing my share"

dropped from 19 percent after the second loan to 6 percent after the third and that the number of people buying bonds rose from 20 to 39 percent.

There were many ways in which the act of buying bonds could be specified in publicity. The major ways employed in the war bond publicity were by indicating the amount to be purchased, the time for buying, and the place to buy. Thus the campaigns said in effect, "Buy an extra \$100 bond during the drive from the solicitor where you work." All available evidence indicates that this type of appeal was far more effective than those couched in more general terms.

4c. A given motivational structure may be set in control of behavior by placing the person in a situation requiring a decision to take, or not to take, a step of action that is a part of the structure.

If an action, like buying bonds, has become a part of a person's motivational structure, one way to bring that structure into control over the person's behavior is to place him in a situation where he must decide whether or not he will buy a bond at that moment. The necessity of making a decision in regard to a specific action requires that motivational structures of which this action is a part be brought to bear in determining the next step in action. When such a decision is required, the action will be taken if the resultant forces in all activated motivational structures are in the direction of that particular action. This means, of course, that forcing a decision will result in the desired action only if appropriate cognitive and motivational structures have been accepted by the person. By the same token, however, it means that the desired action will result if the appropriate structures do exist.

The technique of personal solicitation in selling war bonds made use of this principle. When a person was solicited, he was asked to make a decision to buy, or not to buy, a bond at that time. A solicitor might also take the occasion to try to create favorable cognitive and motivational structures, but the essential function of solicitation lay in the fact that it required the person to make a decision. From these considerations we may con-

clude that personal solicitation should precipitate bond-buying among people whose motivational structures were favorable to buying bonds. In other words, a campaign of personal solicitation should greatly increase the number of people buying bonds if it follows an effective campaign of publicity and education. The more effective the publicity (in creating favorable cognitive and motivational structures), the greater should be the effect of solicitation.

The great mass of data collected after each of the war loans supports these conclusions quite strongly. In Table 3 are presented only some of these findings, selected to illustrate the results under rather different conditions. It is seen that there is a close relation between the number of people solicited in a drive and the number of people actually buying bonds. Further, the percentage of people buying bonds is much greater among those solicited than among those not solicited. In all the data analyzed the same conclusion was reached: people who were personally asked to buy were always found to be more likely to buy—in every drive, in every income bracket, in every occupational group, in every section of the country.

The dependence of the outcome of solicitation upon the existence of favorable motivational structures can be seen in Table 2. Solicitation among people with more favorable struc-

TABLE 3. SOME RELATIONS BETWEEN PERSONAL SOLICITATION AND BUYING

	Second Loan <i>April, 1943</i> %	Third Loan <i>Sept., 1943</i> %	Fourth Loan <i>Jan., 1944</i> %	Fifth Loan <i>June, 1944</i> %
<i>Of all income receivers:</i>				
Were personally solicited	25	50	51	58
Bought extra bonds	20	39	45	47
<i>Of those not solicited:</i>				
Bought extra bonds	12	18	25	22
<i>Of those solicited:</i>				
Bought extra bonds	47	59	63	66
Number of interviews	1,358	1,583	1,441	1,925

tures was much more likely to precipitate buying than among those with less favorable structures (among those with three reasons for buying, 65 percent; two reasons, 57 percent; one reason, 44 percent).

Conclusions

The principles presented here derive from a more extensive theory of human motivation. They are concerned with the particular motivational problem of inducing behavior from the outside. To the extent that they are valid, they should apply to all inductions, whether through the mass media or in a face-to-face situation. They should also apply to inductions attempted for all types of purposes, whether to sell, to train, to supervise work, to produce therapy, and so on. In all such attempts the process of induction must be concerned with the establishment of cognitive, motivational, and behavioral structures. Only when conditions are proper in respect to all three of these will the actual induction of behavior occur.

Applied to the field of mass persuasion, these principles may serve as a yardstick for evaluating the probable success of any proposed campaign. The principles are by no means exhaustive, nor do they give detailed guides for the creative aspects of the development of campaigns. They do, however, provide a list of essential requirements for the success of any campaign of mass persuasion. It can be seen, moreover, that, because of the inherent difficulties of meeting these requirements, campaigns are not likely to make basic changes in the behavior of large numbers of people unless there is a monopolization of the channels of communication or unless the changes being encouraged are in the same direction as those being stimulated by other influences.

HERBERT H. HYMAN AND
PAUL B. SHEATSLEY

Some Reasons Why Information Campaigns Fail

From long experience in studying campaigns and conducting research on public information and attitudes, these two authors have set down some principles which they feel help to explain why persuasive campaigns may fail despite the fact that the channels of communication are loaded with information. The most difficult barriers are psychological rather than physical. Something in the psychological makeup of certain people makes them tend to be chronic "know-nothings," they say. The indications are that people are more likely to find information on a topic that interests them, and to seek information that is in agreement with prior attitudes. But people interpret the same information differently. Furthermore, information does not necessarily change attitudes. All these circumstances stand in the way of imparting specified information and changing attitudes in a desired direction. Dr. Hyman is a professor of sociology at Columbia University, and Dr. Sheatsley is one of the chief officers of the National Opinion Research Center. Their paper appeared in the *Public Opinion Quarterly*, and was copyrighted by that journal, in 1947. It is reprinted by permission of the authors and the journal.

THE CHARTER OF THE United Nations Educational, Scientific, and Cultural Organization contains the following significant statement:

. . . the States parties to this Constitution . . . are agreed and determined to develop and to increase the means of communication between their peoples and to employ these means for the purpose of mutual understanding and a truer and more perfect knowledge of each other's lives. To realize this purpose the Organization will . . . recommend such international agreements as may be necessary to promote the free flow of ideas by word and image.

As a preliminary step, the Preparatory Commission of UNESCO has instructed the Secretariat to survey the obstacles

in the way of such a program.¹ These obstacles to be surveyed include such things as the breakdown and inadequacy of existing communication facilities in many parts of the world, and the political, commercial, and economic restrictions which hamper the free exchange of information throughout the United Nations.

But even if all these *physical* barriers to communication were known and removed, there would remain many *psychological* barriers to the free flow of ideas. It is the purpose of this paper to demonstrate some of these psychological factors that impede communication and thereby to formulate certain principles and guides which must be considered in mass information campaigns. Existence of these psychological factors will be demonstrated by a variety of data gathered in recent surveys of the American public by the National Opinion Research Center, and one general truth is implied throughout the discussion.

The physical barriers to communication merely impede the *supply* of information. In order to increase public knowledge, not only is it necessary to *present* more information, but it is essential that the mass audience *be exposed to* and that it *absorb* the information. And in order to insure such exposure and absorption, *the psychological characteristics of human beings must be taken into account.*

To assume a perfect correspondence between the nature and amount of material presented in an information campaign and its absorption by the public is to take a naïve view, for the very nature and degree of public exposure to the material is determined to a large extent by certain psychological characteristics of the people themselves.² A number of these psychological characteristics are discussed below under the following topics: chronic "know-nothings" in relation to information campaigns; the role of interest in increasing exposure; selective exposure

¹ See "UNESCO's Program of Mass Communication: I," *Public Opinion Quarterly* 10, no. 4 (1946).

² For a theoretical discussion of the problem, see Daniel Katz, "Psychological Barriers to Communication," *The Annals*, March, 1947.

produced by prior attitudes; selective interpretation following exposure; differential changes in attitudes after exposure.

There Exists a Hard Core of Chronic "Know-Nothings"

All persons do not offer equal targets for information campaigns. Surveys consistently find that a certain proportion of the population is not familiar with any particular event. Off-hand, it might be thought that information concerning that event was not distributed broadly enough to reach them, but that this group would still have an equal chance of exposure to other information. Yet, when the knowledge of this same group is measured with respect to a second event, they tend also to have little information in that area. And, similarly, they will have little or no information concerning a third event.

If all persons provided equal targets for exposure, and the sole determinant of public knowledge were the magnitude of the given information, there would be no reason for the same individuals always to show a relative lack of knowledge. *Instead, there is something about the uninformed which makes them harder to reach, no matter what the level or nature of the information.*

Thus in May, 1946, NORC asked a question to determine public knowledge of the report of the Anglo-American Committee on Palestine, which recommended the admission of 100,000 Jewish immigrants to that country. Only 28 percent of the national sample expressed any awareness of this report. It might be assumed that the remaining 72 percent were ready and willing to be exposed, but that there had been too little information about the report. Yet Table 1 shows that this unaware group consistently tended to have less awareness of other information about the international scene which had been much more widely reported.

The size of this generally uninformed group in the population may be indicated by computing an index of general knowledge, based on all five information questions in the field of foreign affairs which were asked on that particular survey. The five subjects covered by these questions were:

TABLE 1.

Percent aware of:	Group which is not aware of Palestine report	Group which is aware of Palestine report
Acheson-Lillienthal report on atomic energy	32%	64%
Spring 1946 meeting of foreign ministers in Paris	39	85
Proposed loan to England	73	96
	N = 931	N = 358

1. The Palestine report spoken of above [1];³
2. The Acheson-Lillienthal report on atomic energy [2];
3. The Paris meeting of the Big Four foreign ministers, then in progress [3];
4. The proposed loan to England, then being debated in Congress [4];
5. The political status of Palestine, the fact that she is ruled by England [5].

Table 2 shows how the population divided in its awareness of these five items. As may be seen, roughly one person out of seven reported no awareness of *any* of the five items, and approximately one person in three had knowledge of no more than *one* of them. This generally uninformed group, therefore, is of considerable magnitude.⁴ It is possible, of course, that the existence of this group may be related to external factors of accessibility to information media, and that if the information were somehow channeled into their vicinity they would soon become exposed. For example, information on foreign affairs is probably less easily available to small-town residents than it is

³ Figures in brackets refer to actual question-wordings, which are reported in the note at the end of this article.

⁴ If anything, the size of the group is underrepresented, for two reasons: (1) the respondent's claim to awareness was accepted at face value, without any check on his actual knowledge; (2) polls consistently tend to over-sample the more literate, higher socioeconomic groups in the population.

TABLE 2.

Aware of:	Percent of national sample
No items	14%
One item	18
Two items	20
Three items	17
Four items	19
Five items	12
Total sample	100%
	N = 1292

to city-dwellers, and we find a relationship, as shown in Table 3, between size of community and awareness of our five items. These differences, however, are relatively small, in comparison with the psychological differences to be shown later in Table 4 and elsewhere. The next section discusses the effect of certain psychological factors on level of knowledge.

Interested People Acquire the Most Information

The importance of *motivation* in achievement or learning, or in assimilating knowledge, has been consistently shown in

TABLE 3.

Size of community	Mean score on knowledge index— number of items known
Metropolitan districts over 1,000,000	2.81
Metropolitan districts under 1,000,000	2.45
Cities 2,500 to 50,000	2.38
Towns under 2,500	2.28
Farms	2.03

academic studies. Yet this important factor is often ignored in information campaigns, amid all the talk of "increasing the flow of information." The widest possible dissemination of material may be ineffective if it is not geared to the public's interests.

It is well known that opinion polls can measure areas of knowledge and ignorance, but the complementary areas of apa-

TABLE 4.

	Percent of total sample expressing consider- able or great interest	
<i>High interest</i>		37%
All eight issues	11%	
Seven issues	11	
Six issues	15	
<i>Medium interest</i>		40
Five issues	15	
Four issues	14	
Three issues	11	
<i>Low interest</i>		23
Two issues	7	
One issue	5	
None	11	
		100%
	N = 1292	

thy and interest have been more often overlooked. Yet they can be just as readily measured, and they are highly significant in understanding the factors behind a given level of knowledge.

NORC, in a poll taken in May, 1946, measured the public's interest in eight different issues in the field of foreign affairs [6]. These issues were:

1. Our relations with Russia;
2. The atomic bomb;
3. Our policy toward Germany;
4. The United Nations organization;

5. The British loan;
6. The meeting of foreign ministers in Paris;
7. Our relations with Franco Spain;
8. Our policy toward Palestine.

Public interest varied widely in these eight issues, ranging from 77 percent of the national sample which reported "considerable" or "great" interest in our relations with Russia to 28 percent which reported "considerable" or "great" interest in our policy toward Palestine. Thus it is clear that each specific information campaign does not start with the same handicap in terms of public apathy. Motivation is high on some issues, low on others.

Nevertheless, there is consistent evidence that interest in foreign affairs tends to be *generalized*. Some people are interested in many or all of the issues; another large group is apathetic toward most or all of them. Intercorrelations (based on approximately 1,290 cases) between interest in one issue and interest in each of the other seven definitely establish this point. The twenty-eight tetrachoric correlation coefficients range from .40 to .82, with a median r of .58. Table 4 shows how the population divides in its interest in these eight issues.

It will be noticed that 11 percent of the sample expressed little or no interest in any of the eight issues, and that another 12 percent were interested in only one or two of them. Almost one-fourth of the population, therefore, reported interest in no more than two of the eight issues—a state of apathy all the more significant when it is remembered that the list included such overpowering subjects as the atomic bomb and our relations with Germany and Russia, and that the respondent's own estimate of his degree of interest, doubtless subject to prestige considerations, was accepted without question.

The close relationship between apathy on the one hand, and ignorance of information materials on the other, is shown in Table 5. It is a likely assumption that both the contrasted groups in the table had equal *opportunity* to learn about the two reports. Yet the information reached approximately half of

TABLE 5.

	Percent who have heard of Acheson report on atomic energy
Respondents with great or considerable interest in atomic bomb	48% N = 953
Respondents with little or no interest in atomic bomb	20 N = 337
	Percent who have heard of Anglo- American report on Palestine
Respondents with great or considerable interest in Palestine policy	51% N = 365
Respondents with little or no interest in Palestine policy	19 N = 921

the interested group, and only about one-fifth of the disinterested.⁵

The relationship between interest and knowledge can be demonstrated in a different way, if we compare the scores of each of our interest groups on our knowledge index. As seen in Table 6, at each stage of increasing interest, knowledge rises correspondingly.

It can be argued, of course, that the exposed people became interested after they had been exposed to the information, and that the disinterested persons are apathetic only because they

⁵ Lazarsfeld reports a similar finding on the relationship of interest to exposure to political information. See P. Lazarsfeld, B. Berelson, and Hazel Gaudet, *The People's Choice* (New York: Duell, Sloan and Pearce, 1944), p. 79.

TABLE 6.

Interested in:	Mean score on knowledge index
No items	.85
One item	1.42
Two items	1.12
Three items	1.89
Four items	2.37
Five items	2.64
Six items	3.15
Seven items	3.50
Eight items	3.81
N = 1292	

were not exposed. It is probable that the two factors *are* interdependent; as people learn more, their interest increases, and as their interest increases, they are impelled to learn more. Nevertheless, from the point of view of initiating a *specific* campaign at some point in time, it remains true that in the case even of outstanding public issues, large groups in the population admit "little or no interest" in the problem.

This fact cannot be ignored by those in charge of information campaigns. Such groups constitute a special problem which cannot be solved simply by "increasing the flow of information." *Scientific surveys are needed to determine who these people are, why they lack interest, and what approach can best succeed in reaching them.*

People Seek Information Congenial to Prior Attitudes

Information campaigns, while they involve the presentation of *facts*, nevertheless present materials which may or may not be congenial with the attitudes of any given individual. Lazarsfeld,⁶ in describing the exposure of a sample panel to political

⁶ *Ibid.*, p. 80.

campaign propaganda, concludes, "People selected political material in accord with their own taste and bias. Even those who had not yet made a decision (on their vote) exposed themselves to propaganda which fit their not-yet-conscious political predispositions."

Our evidence from polling national samples in other information areas supports the view that people tend to expose themselves to information which is congenial with their prior attitudes, and to avoid exposure to information which is not congenial. Although it was not possible to administer before-and-after tests of attitudes, the following technique offers indirect evidence to support the argument of selective exposure.

National samples were asked if they had heard or read anything about a given piece of information. The entire sample was then given the gist of the information in one or two sentences. (In the case of those who had admitted familiarity with the material, the description was prefaced by some such phrase as, "Well, as you remember . . .") Immediately following the description of the information, the entire sample was then asked some relevant attitude question.

We found in every case that the group who reported prior exposure to the information had a different attitudinal reaction from those without prior exposure. One could assume that this difference reflected the influence of the information on those previously exposed, except that, as described above, *both groups*, before being asked the attitude question, had been supplied with identical descriptions of the information in question.

Thus in June, 1946, a national sample of the adult population was asked whether they had heard or read about the Anglo-American Committee report on Palestine [1]. Every respondent was then either told or reminded of the essential provisions of the report, and was asked whether he favored U.S. assistance in keeping order in Palestine if 100,000 additional Jews were admitted to that country [7]. As seen in Table 7, those with prior knowledge of the report were significantly more favorable toward such assistance.

Similarly, in April, 1946, a national sample was asked

whether they had heard or read about the recent joint statement by England, France, and the United States which denounced the Franco government of Spain [8]. Included in the question was the gist of the statement: "the hope that General Franco's government in Spain would soon be followed by a more democratic one." The entire sample was then asked its attitude toward this country's Spanish policy [9]. Again, those who had prior knowledge of the three-power statement were significantly more hostile in their attitudes toward Franco. See Table 7.

TABLE 7.

	Percent of those with opinions who favor U.S. aid in keeping order in Palestine
Previous knowledge of Committee report	36% N = 339
No previous knowledge	30 N = 805
	Percent of those with opinions who favor break- ing relations with Franco
Previous knowledge of three-power statement	32% N = 657
No previous knowledge	21 N = 268

It is true that those who learned about the report or statement for the first time during the interview were more inclined to offer no opinion when questioned on their attitudes, but the above table excludes the "no opinion" group, and comparisons are based only on those with definite opinions.

The differences reported, which are in all likelihood not due to chance, suggest the phenomenon of "selective exposure" to information. In both cases, every respondent was aware of the

contents of the statement or report when he answered the question on policy. Yet in each case, those with *prior* knowledge of the information had significantly different attitudes. It would appear, therefore, that persons reached by the Palestine report were those who were more likely in the first place to favor U.S. assistance there, rather than that they favored U.S. assistance because they were familiar with the information contained in the report. Similarly, it would seem that the group which had prior knowledge of the statement on Spain was already more anti-Franco in their attitudes, rather than that they became more anti-Franco by virtue of exposure.

The fact that people tend to become exposed to information which is congenial with their prior attitudes is another factor which must be considered by those in charge of information campaigns. Merely "increasing the flow" is not enough, if the information continues to "flow" in the direction of those already on your side!

People Interpret the Same Information Differently

It has just been shown that it is false to assume a perfect correspondence between public exposure to information and the amount of material distributed. It is equally false to assume that exposure, once achieved, results in a uniform interpretation and retention of the material.

In a series of experimental studies beginning with the work of Bartlett,⁷ and carried on by a host of other investigators such as Margolies, Clark, Nadel, and Murphy,⁸ it has been consistently demonstrated that a person's perception and memory of materials shown to him are often distorted by his wishes, motives, and attitudes. One demonstration of these general psy-

⁷ F. C. Bartlett, *Remembering* (New York: Macmillan, 1932).

⁸ B. Margolies, unpublished M.A. thesis, Columbia University, New York; K. Clark, "Some Factors Influencing the Remembering of Prose Material," *Archives of Psychology* 253 (1940); S. F. Nadel, "A Field Experiment in Racial Psychology," *British Journal of Psychology* 28 (1937): 195-211; and G. Murphy and J. M. Levine, "The Learning and Forgetting of Controversial Material," *Journal of Abnormal and Social Psychology* 38 (1943): 507-18.

chological findings in the area of international affairs is available in a recent NORC survey.

In September, 1946, a national sample was asked whether they thought that the newspapers *they read* made Russia out to look better than she really is, worse than she really is, or whether they presented accurate information about Russia [10]. The same survey also asked a question to determine where the respondent put the blame for Russian-American disagreements [11]. When the sample was classified into two groups—those who blamed Russia entirely and those who put the responsibility on both countries or on the United States

TABLE 8.

	Percent who say their newspapers make Russia look worse than she really is
Blame Russia entirely for Russian-American disagreements	41% N=458
Blame United States entirely or blame both countries	54 N=168

alone—there were revealed striking differences in beliefs as to whether Russia was being presented fairly or unfairly in the newspapers they read (see Table 8). It is clear from this finding that people selectively discount the information they are exposed to, in the light of their prior attitudes.

The finding is all the more striking when one considers the fact that people tend to read the particular newspapers which are congenial to their own attitudes and beliefs. Thus one would expect the anti-Russian group to be reading newspapers which, if studied by means of objective content analysis, would be found to slant their editorial content against Russia. Simi-

larly, one would expect the pro-Russian group to read newspapers which, if measured objectively, would be found to emphasize favorable news about Russia. Despite this, the anti-Russian group is *less* likely to say *their* newspapers present Russia unfavorably, while the pro-Russian group is *more* likely to say *their* newspapers present Russia unfavorably.

Here, then, is another psychological problem that faces those responsible for information campaigns. Exposure in itself is not always sufficient. People will interpret the information in different ways, according to their prior attitudes.

Information Does Not Necessarily Change Attitudes

The principle behind all information campaigns is that the disseminated information will alter attitudes or conduct. There is abundant evidence in all fields, of course, that informed people actually do react differently to a problem than uninformed people do. But it is naïve to suppose that information always affects attitudes, or that it affects all attitudes equally. The general principle needs serious qualification.

There is evidence, based on investigations made with academic samples, that individuals, once they are exposed to information, change their views *differentially*, each in the light of his own *prior* attitude. Data gathered by NORC in recent national surveys show that these academic findings are equally applicable to the entire adult population.

In a continuing study of attitudes toward the proposed British loan, conducted between December, 1945, and February, 1946, it was found that a significant factor influencing attitudes toward the loan was the belief that this country would or would not get something out of it economically [12]. As shown by Table 9, those who were of the opinion that the loan held advantages to this country were strongly in favor, while those of a contrary opinion, or doubtful, were overwhelmingly opposed to the loan.

Furthermore, 39 percent of those who expressed approval of the loan mentioned some economic advantage as their reason, while 75 percent of those opposed listed an economic argu-

TABLE 9.

	Percent who approve loan to England
We will get advantages from the loan	66% N = 265
Don't know if advantages	29 N = 291
We will not get advantages	20 N = 294

ment. Under these circumstances, it was logical to suppose that attitudes could be changed toward approval of the loan by informing the public of its economic advantages to the United States. It was not possible to conduct a before-and-after test of this thesis, but some interesting findings were revealed by a study of two equivalent samples which were polled simultaneously.

One of these samples was given the appropriate information before being questioned on their attitude. They were told that England had agreed to pay the money back with interest over a period of years, and that England had further agreed to take definite steps to remove restrictions on their trade with us and to join us in promoting world trade in general.⁹ They were then asked whether they approved or disapproved of lending England the specified amount [13]. This was the experimental sample. The control sample was simply asked whether they approved or disapproved of the proposed loan, on the basis of what they had heard about it, with no additional information supplied them [4].

The experiment proved that the given information did materially change attitudes toward the loan. The experimental sample registered a 14 percent higher "approve" vote than did the equivalent control sample which was not given the information. But this overall comparison obscured the *differential* effect of the information.

⁹ This sample was also informed that President Truman had asked Congress to approve the loan, an additional prestige factor probably having some persuasive effect.

For example, there was no difference between the two samples in the proportion of "disapprovers" who gave an economic argument for their disapproval. Fifty-one percent of those in the control group who were opposed gave as their reason that "England won't pay us back," and 50 percent of those in the experimental group who were opposed offered the same argument—in spite of the fact that they had been specifically informed of England's agreement to return the money with interest. It was apparent that a large group of those opposed to the loan were rooted to their belief that the money would not be repaid, and the mere information that England had *agreed* to repay the loan was of no effect in changing their attitudes.

TABLE 10.

Percent approving loan among those who:	Control sample (not exposed to information)	Experimental sample (exposed to information)
Trust England to cooperate with us	45% N=619	70% N=242
Do not trust England to cooperate	17 N=231	18 N=133

Table 10 shows another significant differential effect of the information. Among those who were already favorably disposed toward England, the information given to the experimental group was sufficient to sway a large proportion toward approval of the loan [14]. Less than half of this group friendly to England favored the loan in the control sample, but in the experimental sample, which was given the information, the proportion rises to 70 percent. But among those with hostile or suspicious attitudes toward England, the information had *no effect whatever*. This group was overwhelmingly opposed to the loan without the information, and they remained overwhelmingly opposed to it even when they were exposed to the information.

Conclusions

The above findings indicate clearly that those responsible for information campaigns cannot rely simply on "increasing the flow" to spread their information effectively. The psychological barriers we have pointed out create real problems for those charged with the task of informing the public, and in many cases public opinion surveys offer the only means by which these problems can be recognized and thereby overcome.

Surveys are already widely used to provide the information director with scientific knowledge of the quantitative distribution of his material. They can tell him how many people have been reached by his information and, more important, which particular groups have not been reached. Surveys, too, can quite easily measure public interest in information materials and areas, thus providing him with accurate knowledge of the handicaps his program faces within various population groups.

But on a different and higher level, surveys can inform the information director of the whole structure of attitudes on any public issue. They can tell him the major factors affecting public opinion on the issue, and the relative influence of these various factors in determining attitudes. They can tell to what extent information has reached the public and how far it has changed existing opinions. They can also tell what information is still needed and what aspects of it must be stressed in order to reach the unexposed or unsympathetic groups.

Psychological barriers to information campaigns are readily admitted by those who stop to consider the point, but they seem often to be overlooked in the general eagerness simply to distribute *more* information. The data we have cited in this paper are merely those which happen to be available from recent NORC surveys, but the kinds of barriers we have mentioned apply eternally to all types of public information. By documenting the very real effect that these psychological barriers have on public exposure to and interpretation of information materials, we hope we will encourage a proportionately greater attention to these intangible factors on the part of those

who plan and carry out programs involving mass communication.

Questions Referred to in Text of Article

1. Did you hear or read anything about the recent report by the Anglo-American Committee on Palestine?

2. Did you hear or read anything about the report on the control of atomic energy, which was published by the State Department a few weeks ago? It's sometimes called the Acheson report.

3. Have you heard or read anything about the recent meeting in Paris where Secretary of State Byrnes has been talking with the foreign ministers of England, France, and Russia?

4. Have you heard about the recent proposals for a U.S. loan to England, and for other economic and financial agreements between the two countries? (*If "Yes"*) In general, do you approve or disapprove of these proposals?

5. As far as you know, is Palestine an independent country, or is she ruled by someone else? (*If "Someone else"*) Do you happen to know what country does rule her?

6. We'd like to know how much interest the public takes in some of these questions. For instance, how much interest do you take in news about (*each item below*)—a great deal of interest, a considerable amount, only a little, or none at all? (United Nations, our policy toward Palestine, the proposed loan to England, our policy toward Germany, our relations with Franco Spain, the atomic bomb, the recent meeting of foreign ministers in Paris, our relations with Russia.)

7. (As you remember) The report recommends that 100,000 more Jewish refugees be admitted to Palestine in spite of protests by the Arabs there. President Truman has said he thinks this ought to be done. Now England says that the United States ought to help her keep order in Palestine if trouble breaks out between the Jews and the Arabs. Do you think we *should* help keep order there, or should we keep out of it?

8. Now about Spain. Have you heard about the recent statement, in which the United States joined with England and

France to express the hope that General Franco's government in Spain would soon be followed by a more democratic one?

9. Which one of these three statements comes closest to *your* opinion about our government's policy toward Spain? (*Card handed to respondent*)

A. We should go even further in opposing Franco, and should break diplomatic relations with his government.

B. It was a good thing to speak out against Franco, but we have gone far enough for the present.

C. We have already gone too far in working against Franco, and are interfering in Spain's internal affairs.

10. Do you think the newspapers you read generally make Russia look better or worse than she really is?

11. In the disagreements between Russia and the United States, do you think one of the countries is entirely to blame, or do you think both countries have something to do with the misunderstanding?

12. Aside from getting paid interest on the loan, do you know whether the United States would be getting anything else out of the deal—that is, would *we* be getting any advantages or concessions? (*If "Yes"*) What?

13. Under these proposals, we would lend England nearly four billion dollars, which they have agreed to pay back with interest during the next fifty years. England has also agreed to take definite steps to remove restrictions on our trade with them, and to join us in promoting world trade in general. President Truman has now asked Congress to approve this plan. Do you think Congress should or should not approve it? (*Unless "Don't know"*) Why do you think so?

14. In general, do you think England can be trusted to cooperate with us in the future, or don't you think so?

CARL I. HOVLAND, ARTHUR A. LUMSDAINE,
AND FRED D. SHEFFIELD

*The Effect of Presenting
"One Side" versus "Both Sides"
in Changing Opinions
on a Controversial Subject*

This is one of the papers that grew out of Hovland's wartime research for the Information and Education division of the Army, and illustrates how well-designed research in the hands of an able scholar can be generalized from a very practical problem to theory of wide generality. This started with the practical problem of whether it is more desirable to ignore the opposing position, or to give it free advertising by stating it so as to be able to answer it. The conclusion of this study is that it depends on who the audience is. Later research in this area has concluded that it depends also on whether the audience is likely to hear the other side anyway, in which case it is a good idea to state the other side so that the audience will have counterarguments ready. Until his untimely death in 1959, Dr. Hovland was chairman of the psychology department at Yale. Dr. Lumsdaine is chairman of the psychology department at Washington, and Dr. Sheffield is a professor of psychology at Yale. This is a chapter from their book, *Experiments on Mass Communication*, published and copyrighted by the Princeton University Press, 1949. It is reprinted by permission of authors and publisher.

The Problem

IN DESIGNING Army orientation programs, an issue which was frequently debated by the producers was: When the weight of evidence supports the main thesis being presented, is it more effective to present only the materials supporting the point being made, or is it better to introduce also the arguments of those opposed to the point being made?

The procedure of presenting only the arguments supporting the thesis is often employed on the grounds that when the preponderance of the arguments supports the point being made,

presenting opposing arguments or misconceptions merely raises doubts in the minds of the audience. On the other hand, the procedure of presenting the arguments for "both sides" may be supported on grounds of fairness—the right of the members of the audience to have access to all relevant materials in making up their minds. Furthermore, there is reason to expect that audience members already opposed to the point of view being presented may be "rehearsing" their own arguments while the topic is being presented and in any case will be distracted and antagonized by the omission of the arguments on their side. Thus, according to proponents of the two-sided arguments, presentation of the *audience's* arguments at the outset possibly would be expected to produce better reception of the arguments which it is desired to convey.

The present experiment was set up to provide information on the relative effectiveness of these two alternative types of program content, in relation to the variable of men's initial position for or against the position advocated in the program.

Method of Study

THE TWO PROGRAMS USED

At the time the experiment was being planned (early in 1945), it was reported that Army morale was being adversely affected by over-optimism about an early end to the war. A directive was issued by the Army to impress upon troops a conception of the magnitude of the job remaining to be done in defeating the Axis. This furnished a topic on which arguments were available on both sides but where the majority of military experts believed the preponderance of evidence supported one side. It was therefore chosen for experiment.

Radio transcriptions were used to present the two programs, primarily because of the simplicity with which they could be prepared in alternative forms. The basic outline of the programs' content was prepared by the experimental section of the research branch. All materials used were official releases from the Office of War Information and the War Department. The

final writing and production of the programs were carried out by the Armed Forces Radio Service.

Both of the two programs compared here were in the form of a commentator's analysis of the Pacific war. The commentator's conclusion was that the job of finishing the war would be tough and that it would take at least two years after V-E Day.

"One Side." The major topics included in the program which presented *only* the arguments indicating that the war would be long (hereafter labeled Program A) were: distance problems and other logistical difficulties in the Pacific; the resources and stock piles in the Japanese empire; the size and quality of the main bulk of the Japanese army that we had not yet met in battle; and the determination of the Japanese people. This program ran for about fifteen minutes.

"Both Sides." The other program (Program B) ran for about nineteen minutes and presented all of these same difficulties in exactly the same way. The additional four minutes in this latter program were devoted to considering arguments for the other side of the picture—U.S. advantages and Japanese weaknesses such as: our naval victories and superiority; our previous progress despite a two-front war; our ability to concentrate all our forces on Japan after V-E Day; Japan's shipping losses; Japan's manufacturing inferiority; and the future damage to be expected from our expanding air war. These additional points were woven into the context of the rest of the program, each point being discussed where it was relevant.

It should be pointed out that while Program B gave facts on *both sides* of the question, it did not give equal space to both sides, nor did it attempt to compare the case for thinking it would be a long war with the *strongest possible case* for believing it would be an easy victory and a short war. It took exactly the same stand as that taken by Program A—namely, that the war would be difficult and would require at least two years. The difference was that Program B mentioned the opposite arguments (e.g., U.S. advantages) whenever they were relevant. In effect it argued that the job would be difficult, even taking into account our advantages and the Japanese weaknesses.

DESIGN FOR THE EXPERIMENT

The general plan of the experiment was to give a preliminary "opinion survey" to determine the men's initial opinions about the Pacific war and then to remeasure their opinions at a later time, after the transcriptions had been played to them in the course of their orientation meetings. In this way the *changes* in their opinions from "before" to "after" could be determined. A control group, which heard *no* transcription, was also surveyed as a means of determining any changes in response that might occur during the time interval due to causes other than the transcriptions—such as the impact of war news from the Pacific.

a. Anonymity of response and avoiding suspicion of "guinea-pigging." It was considered necessary to obtain opinions *anonymously*, and also to measure the effects of the program without awareness on the part of the men that an experiment was in progress. These precautions were dictated by the type of effect being studied—it was felt that if the men either thought their responses were identified by name or if they knew they were being "tested," some men might give "proper" or otherwise distorted answers rather than answers expressing their true opinions in the matter. In the experiment reported here, the methods of achieving this lack of awareness and assurance of anonymity were inherent partly in the measuring instrument and partly in the design and administration of the experiment and will be mentioned as these subjects are discussed. These precautions were taken mainly on a priori grounds, and they do not indicate that evidence for any tendency to be suspicious was actually found.

b. The measuring instrument. The questionnaire used in the preliminary "survey" (before hearing the transcription) consisted mainly of check-list questions plus a few questions in which men were asked to write in their own answers. The content of questions that formed the measuring instrument per se will be indicated later in presenting the results of the study. In addition, the preliminary "survey" contained *background* items

for obtaining information about the individual's education, age, etc., and what might be called "camouflage" items—questions dealing with opinions not related to the orientation topic. The latter were not necessary for the experimental measurements per se but were used to give scope to the "survey" and prevent a concentration of items dealing with material to be covered in the transcriptions. This was done partly to help make the survey seem realistic to the men but mainly to avoid "sensitizing" them to the topic of the subsequently presented orientation material through placing too much emphasis on it in the survey.

c. Pretesting. One of the important steps in preparing the items used in questionnaires was what may be termed *qualitative pretesting* of the wording and meaning of the questionnaire items. This consisted of face-to-face interviewing of soldiers, with the questions asked orally by the interviewer in some cases or read by the respondent in others. In this way, misinterpretations of the questions and misunderstood words were uncovered and at the same time natural wording and natural categories of response were revealed. In addition to its value in improving the wording of questions, this pretest also served as an important method of helping to determine the men's opinions on the relevant topics so that the arguments and appeals to be used in the programs could be geared to the men's opinions and information. To provide more extensive data for this purpose the interviewing was followed up by the administration of a preliminary questionnaire using a sample of about 200 soldiers. Liberal use of "free-answer" questions was made in this questionnaire in order to get detailed information concerning men's reasons for expecting a long or a short war.

d. Administration of the experiment. For proper administration of the experiments there were three major requirements: presentation of the transcriptions under realistic conditions, preventing the men in the sample from realizing that the experiment was in progress, and getting honest answers in the questionnaires. For realism in presentation, the transcriptions for the experimental groups were incorporated into the train-

ing program and scheduled as part of the weekly orientation hour. This not only insured realistic presentation but also helped to avoid indicating that effects of the transcriptions were being tested.

The preliminary "survey" had been presented as being part of a War Department survey "to find out how a cross section of soldiers felt about various subjects connected with the war," with examples being given of previous research branch surveys and how they were used. Questionnaires were administered to all the men in a company at once, the men being assembled in mess halls and other convenient buildings for the purpose. The questionnaires were administered by "class leaders" selected and trained for the job from among the enlisted personnel working at the camp. In an introductory explanation of the survey the class leader stressed the importance of the survey and the anonymity of answers. No camp officers were present at these meetings and the men were assured that the surveys went directly to Washington and that no one at the camp would get a chance to see what they had written.

e. Problems in the administration of the second questionnaire. To prevent suspicion of an "experiment" arising from the administration of two surveys within a short space of time, the second questionnaire differed from the first one both in its form and its announced purpose. Thus the first questionnaire was given as a general War Department "survey," while the second one was given during the orientation meetings to "find out what men thought of the transcriptions" (or, in the control group, "what they thought of their orientation meetings").

The preliminary "survey" was administered during the first week of April, 1945, to eight quartermaster training companies. During the following week eight platoons, one chosen at random from each of the eight companies, heard Program A (which presented only one side) during their individual orientation meetings. Another group of eight platoons, similarly chosen, heard Program B (which presented both arguments). Immediately after the program the men filled out the second questionnaire, ostensibly for the purpose of letting the people who made the programs know what the men thought of it. In-

cluded in this second questionnaire, with appropriate transitional questions, were some of the same questions that had been included in the earlier survey, asking the men how they personally sized up the Pacific war. A third group of eight platoons served as the control with no program. They filled out a similar questionnaire during their orientation meeting, which, in addition to asking the same questions on the Pacific war, asked what they thought of their orientation meetings and what they would like in future orientation meetings. For the control group, the latter questions—in lieu of the questions about the transcriptions—were represented to the men as the main “purpose” of the questionnaire.

While twenty-four platoons were used for this experiment, the units reported at only about 70 percent strength at the preliminary survey and at the orientation meetings. The “shrinkage” was therefore quite large as to number of men present *both* times, and the sample available for “before-after” analysis was consequently small (a total of 625 men, with 214 in each experimental group and the remaining 197 men in the control group). In view of the rapidly changing picture in the Pacific, however, it was considered inadvisable to repeat the experiment at another camp.

Results

The following results are based on an analysis of the responses of men whose initial survey could be matched with their questionnaire given in the orientation meetings. While all of the questionnaires were anonymous, the “before” and “after” questionnaires of the same individuals could be matched on the basis of answers to such background questions as years of schooling, date of birth, etc.

EFFECTS ON OPINIONS OF MEN WHO INITIALLY ESTIMATED A LONG WAR AND ON THOSE WHO INITIALLY ESTIMATED A SHORT WAR

The main question used to evaluate the effectiveness of the two presentation methods was one asking the men for their

best guess as to the probable length of the Pacific war after V-E Day. The results of this question were tabulated in terms of changes in estimate of the probable duration of the Pacific war. A change was defined as a difference of one-half year or more between the man's estimate in the earlier survey as compared with his estimate after hearing the program.

The results are analyzed in terms of *net effect*. Some men changed to a longer estimate and some changed to a shorter estimate; the net change for a group is the proportion changing to a longer estimate minus the number changing to a shorter estimate. However, some changes in each direction also occurred among the men in the control group who heard no program. The latter changes are attributable to the imperfect reliability of the question and also to the fact that, during the one-week period between the before and after tests, war news and varying interpretations of this news probably affected the men's opinions to some extent. Therefore, in order to get *net effect* of the program on a given group, the net change among the program men had to be corrected by subtracting from it the net change that occurred among men in the control group.

As was mentioned earlier, one of the arguments against presenting only one side of an issue rests on the anticipated adverse effect upon the individuals opposed to the point being presented. Therefore, the results were analyzed separately for men who were initially favorable and those initially unfavorable to the stand taken by the programs. The basis for distinguishing these two groups was whether their initial estimate of the length of the war was less than two years, or was two years or more. A two-year estimate was taken as the criterion primarily because this was the minimum estimate given by the commentator in the transcriptions, and thus served to distinguish between those who favored and those who disagreed with his point of view.

The net effects of the two ways of presenting the orientation material are shown below for these two subgroups of men: those initially estimating a war of *two or more years* (the "favorable" group) and those initially estimating a war of less than two years (the "unfavorable" group).

The following chart shows that the *net effects* were different for the two ways of presenting the orientation material depending on the initial stand of the listener. The program giving only one side was more effective for men initially favoring the stand, that is, for the men who agreed with the point of view of the program that the war would take at least two years. On the other hand, the program giving some of the U.S. advantages in addition to the difficulties was more effective for men initially opposed, that is, for men who expected a war of less than two years. In the present sample there happened to be about three men with an initially unfavorable attitude to every man with an initially favorable attitude, so that the overall net effect on the *total* group was almost exactly the same for the two programs.

TABLE 1. NET EFFECTIVENESS OF PROGRAM A AND PROGRAM B FOR MEN WITH INITIALLY UNFAVORABLE AND MEN WITH INITIALLY FAVORABLE ATTITUDES

Among men whose initial estimate was " <i>Unfavorable</i> " (Estimated a short war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	36%
Program B (both sides)	48
Difference: (B - A)	12
Among men whose initial estimate was " <i>Favorable</i> " (Estimated a long war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	52%
Program B (both sides)	23
Difference: (B - A)	-29

EFFECTS ON OPINION OF MEN WITH
DIFFERENT YEARS OF SCHOOLING

When the results were broken down according to years of schooling it was found that the program which presented both sides was more effective with better-educated men and the program which presented one side was more effective with less-educated men. The results are shown in Table 2, comparing the effects on men who did not graduate from high school with the effects on high school graduates.¹ This breakdown by education divides the sample into approximately equal halves.

The results show that the program giving both sides was *less* effective with the nongraduates but *more* effective with the high school graduates.

TABLE 2. NET EFFECTIVENESS OF PROGRAM A AND PROGRAM B
FOR MEN OF DIFFERENT EDUCATIONAL BACKGROUNDS

Among men who did not graduate from high school	
Net percent of men changing to a longer estimate	
Program A (one side only)	46%
Program B (both sides)	31
Difference: (B - A)	-15
Among men who graduated from high school	
Net percent of men changing to a longer estimate	
Program A (one side only)	35%
Program B (both sides)	49
Difference: (B - A)	14

¹ The "did not graduate" group included those whose schooling was limited to grammar school plus those who entered high school but did not finish. The "graduated from high school" group included all high school graduates, regardless of whether they went on to college or not.

EFFECTS WHEN BOTH EDUCATION AND INITIAL ESTIMATES
ARE CONSIDERED

The differential effects shown above are for the educational subgroups as a whole, without regard to the differences between men initially favoring and initially opposing the stand taken by the programs within the educational subgroups. An analysis was made of the effects for these further subgroupings within the educational groups. However, this further break divides the total group of men into eight subgroups, some of which are very small and are consequently subject to large sampling errors. This fact should be kept in mind in interpreting the net effects in Table 3.

It can be seen that a greater net effect was obtained for the program covering both sides in all of the subgroups except that of the nongraduates who initially expected a war of two or more years. As mentioned above, the results are very unstable because of the small samples in the subgroups. This is particularly true of the subgroups with an initial estimate of two or more years since only about one man in four guessed a war of two or more years in the preliminary survey. However, the difference between the results from the two kinds of program is so large for the nongraduates initially expecting a war of two or more years that even though the number of cases is very small it is very unlikely that a difference this large would be obtained due to sampling error. (The statistical probability based on comparison of percentages for samples of the size used is less than one chance in 100.)

CONCLUSIONS SUGGESTED THUS FAR

The conclusions suggested by the results presented so far in this report may be summarized as follows. Giving the strong points for the "other side" can make an argument more effective at getting across its message, particularly for the better-educated men and for the men who are already opposed to the stand taken. This difference in effectiveness, however, is likely to be reversed for the less-educated men, and in the extreme

TABLE 3. NET EFFECTIVENESS OF PROGRAM A AND PROGRAM B FOR MEN WITH INITIALLY UNFAVORABLE AND MEN WITH INITIALLY FAVORABLE ATTITUDES, SHOWN SEPARATELY FOR MEN WITH DIFFERENT EDUCATIONAL BACKGROUNDS

A. Effects among Men Who Did Not Graduate from High School	
Among men whose initial estimate was " <i>Unfavorable</i> " (Estimated a short war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	44%
Program B (both sides)	51
Difference: (B - A)	7
Among men whose initial estimate was " <i>Favorable</i> " (Estimated a long war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	64%
Program B (both sides)	-3
Difference: (B - A)	-67
B. Effects among High School Graduates	
Among men whose initial estimate was " <i>Unfavorable</i> " (Estimated a short war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	30%
Program B (both sides)	44
Difference: (B - A)	14
Among men whose initial estimate was " <i>Favorable</i> " (Estimated a long war)	
	Net percent of men changing to a longer estimate
Program A (one side only)	39%
Program B (both sides)	54
Difference: (B - A)	15

TABLE 4. EVALUATION OF FACTUAL COVERAGE BY MEN HEARING PROGRAM A AND PROGRAM B

Among those hearing	Net percent of men saying that the program did a good job of giving the facts on the Pacific War
Program A (one side only)	61%
Program B (both sides)	54
Among those hearing	Net percent of men saying that the program took all of the important facts into account
Program A (one side only)	48%
Program B (both sides)	42

case the material giving both sides may have a negative effect on poorly educated men already convinced of the stand taken by a program. (This would seem especially likely if the strong points for the other side had not previously been known to, or considered by, this latter group of men.) From these results it would be expected that the total effect of either kind of program on the group *as a whole* would depend on the group's educational composition and on the initial division of opinion in the group.

MEN'S EVALUATION OF THE FACTUAL COVERAGE

One factor that should tend to make a presentation that takes into account both sides of an issue more effective than a presentation covering only one side is that the men would believe the former treatment more impartial and authoritative.

In the present study, however, the men as a whole did not consider the factual coverage more complete in the program giving our advantages in addition to the difficulties we face. It can be seen above that the factual coverage was not considered

better in the program giving our advantages as well as the difficulties. If anything, the difference was in the opposite direction.

The explanation of this unexpected result apparently lies in the fact that *both* programs omitted any mention of Russia as a factor in the Pacific war, and *this omission seemed more glaring in the presentation that committed itself to covering both sides of the question*. At the time that the Pacific war was chosen as the orientation subject for the experiment, it was recognized that a weakness of this topic was that no stand could be taken on the help to be expected from Russia. Thus the difference between the two presentations was necessarily reduced because they *both* failed to mention an important argument on the "other side," namely that Russia might come in. It was not anticipated, however, that this omission would be more noticeable in the program that otherwise covered both sides. But that this happened is suggested by the evidence below.

Included in the program questionnaire was the following "write-in" question: "What facts or topics that you think are important to the war with Japan are not mentioned in the program?" The percentages writing in that aid or possible aid from Russia was not mentioned in the program was 23 for the program giving both sides and only 13 for the program giving just one side. This difference was *even more pronounced among groups that would be expected to be especially sensitive to this omission*, such as men who were initially optimistic about length of the war, men with better education, and men who had expected a great deal of help from Russia in the war against Japan.

SEPARATE ANALYSIS OF DATA FOR MEN MOST LIKELY TO
NOTE OMISSION OF RUSSIAN AID

Evidence that omitting to mention help from Russia detracted more from the program giving both sides than from the one-sided program was obtained from a separate analysis of (a) the evaluations of the factual coverage, and (b) the effects of the program on opinions, *among the men who would seem to*

be most likely to note the omission of possible aid. These were the men who, in the preliminary survey, counted on a great deal of help from Russia and also expected a war of less than two years.² The results for the programs on these men are shown below. For comparison, the results are also shown for the men who expected a war of less than two years but did not count on a great deal of help from Russia.

a. Differences in evaluation of factual coverage (among men most likely to note omission of Russian aid). The implication of these results is that the authenticity of Program B (which presented both sides) suffered from the omission of the subject of Russia.

The above results suggest that if the program covering both sides had dealt with the subject of Russia, it might have been considered more complete in its factual coverage by the men as a whole. This implication received corroboration from the fact that in a fairly large-scale pretest of the two programs, conducted at a time when possible aid from Russia was a less important news topic, *the program covering both sides was considered more complete in its factual coverage.* This pretest was conducted on 347 infantry reinforcements in March, 1945, and practically no difference was obtained between the two programs in the percentages of men noting the omission of Russian aid. In the present study the programs were played during the second week of April, less than a week after the Russians announced that they would not renew their nonaggression pact with Japan.

b. Differences in effect on estimates of length of war (among men most likely to note omission of Russian aid). Not only did the omission of Russia affect men's evaluation of the factual coverage in Program B, but it also appeared to reduce the effect of the program on the men's estimates of the length of the war. Evidence on the latter point comes from an analysis of the

² The breakdown according to expected help from Russia was based on a question asking the men how much help against Japan they expected from our allies and asking those checking "a great deal" to write in the names of the allies from which they expected a great deal of help. In the present sample, 41 percent of the men checked "a great deal" and wrote in "Russia" as one of the allies from which a great deal of help was expected.

TABLE 5. EVALUATION OF FACTUAL COVERAGE FOR MEN WITH INITIALLY UNFAVORABLE OPINIONS (I.E., OPTIMISTIC ABOUT LENGTH OF WAR)

A. Proportion of Men Who Say the Program Did a Good Job of Giving the Facts on the Pacific War	
Among men who counted on a great deal of Russian help ^a	
Among those hearing	Percent saying it did a good job of giving the facts
Program A (one side only)	53%
Program B (both sides)	37
Difference: (B - A)	-16
Among men who did not count on a great deal of Russian help ^b	
Among those hearing	Percent saying it did a good job of giving the facts
Program A (one side only)	56%
Program B (both sides)	61
Difference: (B - A)	5
B. Proportion of Men Who Say the Program Took All of the Important Facts into Account	
Among men who counted on a great deal of Russian help ^a	
Among those hearing	Percent saying it took all important facts into account
Program A (one side only)	46%
Program B (both sides)	28
Difference: (B - A)	-18
Among men who did not count on a great deal of Russian help ^b	
Among those hearing	Percent saying it took all important facts into account
Program A (one side only)	44%
Program B (both sides)	46
Difference: (B - A)	2

^aN's: 68 for Program A; 71 for Program B.

^bN's: 91 for Program A; 80 for Program B.

net effects of the programs on opinions of men in the same subgroups as in the preceding chart. The results of this analysis are shown in Table 6.

These results indicate that among the men for whom the presentation with both sides is most effective (i.e., the men initially holding unfavorable opinions) the advantage of the "both sides" presentation was less among those counting on a great deal of help from Russia than among those not expecting much help. These findings strongly suggest that the effects of the program giving some of the "other side" would have been even greater on those opposed to the stand taken if *all* of the other side could have been covered.

All of the results in this section seem to support one important conclusion, namely, that if a presentation supporting a particular conclusion attempts to take both sides of the issue

TABLE 6. NET EFFECTIVENESS OF PROGRAM A AND PROGRAM B FOR MEN WITH INITIALLY UNFAVORABLE OPINIONS (I.E., OPTIMISTIC ABOUT LENGTH OF WAR)

Among men who <i>counted</i> on a great deal of Russian help ^a	
Among those hearing	Percent of men changing to a longer estimate
Program A (one side only)	36%
Program B (both sides)	43
Difference: (B - A)	7
Among men who <i>did not count</i> on a great deal of Russian help ^b	
Among those hearing	Percent of men changing to a longer estimate
Program A (one side only)	36%
Program B (both sides)	52
Difference: (B - A)	16

^aN's: 66 for Program A; 71 for Program B.

^bN's: 86 for Program A; 79 for Program B.

into account, it must include *all* of the important negative arguments or the presentation may "boomerang" by failing to live up to the expectation of impartiality and completeness. Apparently a one-sided presentation in which the conclusion is stated in advance and the reasons for this conclusion are then given will be accepted as the argument for a given point of view without much loss of authenticity resulting from failure to cover the other side. However, if a presentation commits itself to taking everything into account, either by announcing this in advance or by actually covering parts of each side of the issue, it will seem less authentic than a single-sided presentation if any important facts known to the audience are not included in the discussion, and its effectiveness at changing opinions will be reduced *among those who are most aware of the point omitted*.

Summary

1. Presenting the arguments on both sides of an issue was found to be more effective than giving only the arguments supporting the point being made, in the case of individuals who were *initially opposed* to the point of view being presented.
2. For men who were *already convinced* of the point of view being presented, however, the inclusion of arguments on both sides was less effective for the group as a whole than presenting only the arguments favoring the general position being advocated.
3. Better-educated men were more favorably affected by presentation of both sides; poorly educated men were more affected by the communication which used only supporting arguments.
4. The group for which the presentation giving both sides was *least* effective was the group of poorly educated men who were already convinced of the point of view being advocated.
5. An important incidental finding was that omission of a relevant argument was more noticeable and detracted more from effectiveness in the presentation using arguments on both sides than in the presentation in which only one side was discussed.

HERBERT E. KRUGMAN

*The Impact of Television Advertising:
Learning without Involvement*

Krugman here tries to sort out some of the interrelations among communication stimuli, attitudes, and behavior. He points out that advertising commonly operates in a situation of low involvement, where attitude change is usually not the first criterion of effect, but often follows long after a gradual change in perception and perhaps some behavioral choices. That is, if Brand A is made more salient than Brand B, there is a good chance that an individual will buy Brand A, and if he changes attitude at all it will probably be afterward. This is one reason, Krugman says, why the skills of Madison Avenue may be of less use in noncommercial, high-involvement campaigns than might be expected. Dr. Krugman is vice-president of MARPLAN. The paper, initially a speech presented by Dr. Krugman to the American Association for Public Opinion Research, was published originally in the *Public Opinion Quarterly*, and copyrighted by that journal, in 1965. It is reprinted by permission of the author and the copyright holder.

AMONG THE WONDERS of the twentieth century has been the ability of the mass media repeatedly to expose audiences numbered in millions to campaigns of coordinated messages. In the post-World War I years it was assumed that exposure equaled persuasion and that media content therefore was the all-important object of study or censure. Now we believe that the powers of the mass media are limited. No one has done more to bring about a counterbalancing perspective than ex-AAPOR president Joseph Klapper, with his well-known book *The Effects of Mass Media*,¹ and the new AAPOR president Raymond Bauer, with such articles as "The Limits of Persuasion."²

It has been acknowledged, however, that this more carefully delimited view of mass media influence is based upon analysis of largely noncommercial cases and data. We have all wondered

¹ Joseph Klapper, *The Effects of Mass Media* (Glencoe, Ill.: The Free Press, 1960).

² Raymond Bauer, "The Limits of Persuasion," *Harvard Business Review*, September-October, 1958, pp. 105-10.

how many of these limitations apply also to the world of commerce, specifically advertising. These limitations will be discussed here as they apply to television advertising only, since the other media include stimuli and responses of a different psychological nature, which play a perhaps different role in the steps leading to a purchasing decision.

The tendency is to say that the accepted limitations of mass media do apply, that advertising's use of the television medium has limited impact. We tend to feel this way, I think, because (1) we rarely feel converted or greatly persuaded by a particular TV campaign, and (2) so much of TV advertising content is trivial and sometimes even silly. Nevertheless, trivia have their own special qualities, and some of these may be important to our understanding of the commercial *or* the noncommercial use and impact of mass media.

To begin, let us go back to Neil Borden's classic Harvard Business School evaluation of the economic effects of advertising.³ Published in 1942, it concluded that advertising (1) accelerates growing demand or retards falling demand, i.e., it quickens the pulse of the market, and (2) encourages price rigidity but increases quality and choice of products. The study warned, however, that companies had been led to overlook price strategies and the elasticity of consumer demand. This was borne out after World War II by the rise of the discounters!

The end of World War II also brought mass television and an increased barrage of advertising messages. How much could the public take? Not only were early TV commercials often irritating, but one wondered whether all the competition would not end in a great big buzzing confusion. Apparently not! Trend studies of advertising penetration have shown that the public is able to "hold in memory," as we would say of a computer, a very large number of TV campaign themes correctly related to brands. The fact that huge sums and energies were expended to achieve retention of these many little bits of information should not deter us from acknowledging the success of the overall effort.

³ Neil Borden, *The Economic Effects of Advertising* (Chicago: Irwin, 1942).

It is true that in some categories of products the sharpness of brand differentiation is slipping, as advertising themes and appeals grow more similar. Here the data look, as one colleague put it, "mushy." In such categories the product is well on its way toward becoming a commodity; even while brand advertising continues, the real competition is more and more one of price and distribution. But prices, too, are advertised, although in different media, and recalled.

What is lacking in the required "evaluation" of TV advertising is any significant body of research specifically relating advertising to attitudes, and these in turn to purchasing behavior or sales. That is, we have had in mind a model of the correct and effective influence process which has not yet been verified. This is the bugaboo that has been the hope and the despair of research people within the industry. Always there looms that famous pie in the sky: if the client will put up enough money, if he will be understanding enough to cooperate in blacking out certain cities or areas to permit a controlled experiment, if the cities or areas under study will be correctly matched, if the panels of consumers to be studied will not melt away in later not-at-homes, refusals, or changes of residence, if the sales data will be "clean" enough to serve as adequate criteria—*then surely* one can truly assess the impact of a particular ad campaign! Some advertisers, too, are learning to ask about this type of evaluation, while the advertising agencies are ambivalent and unsure of their strength.

This seems to be where we are today. The economic impact of TV advertising is substantial and documented. Its messages have been learned by the public. Only the lack of specific case histories relating advertising to attitudes to sales keeps researchers from concluding that the commercial use of the medium is a success. We are faced then with the odd situation of knowing that advertising works but being unable to say much about why.

Perhaps our model of the influence process is wrong. Perhaps it is incompletely understood. Back in 1959 Herbert Zielske, in "The Remembering and Forgetting of Advertising," demonstrated that advertising will be quickly forgotten if not

continuously exposed.⁴ Why such need for constant reinforcement? Why so easy-in and easy-out of short-term memory? One answer is that much of advertising content is learned as meaningless nonsense material. Therefore, let us ask about the nature of such learning.

An important distinction between the learning of sense and nonsense was laid down by Ebbinghaus in 1902 when he identified the greater effects of order of presentation of stimuli on the learning of nonsense material. He demonstrated a U curve of recall, with first and last items in a series best remembered, thus giving rise also to the principles of primacy and recency.⁵

In 1957, many years later, Carl Hovland reported that in studying persuasion he found the effects of primacy and recency greater when dealing with material of less ego-involvement. He wrote, "Order of presentation is a more significant factor in influencing opinions for subjects with relatively weak desires for understanding, than for those with high 'cognitive needs.'" ⁶ It seems, therefore, that the nonsensical à la Ebbinghaus and the unimportant à la Hovland work alike.

At the 1962 AAPOR meetings I had the pleasure of reading a paper on some applications of learning theory to copy-testing. Here it was reported that the spontaneous recall of TV commercials presented four in a row formed a distinct U curve. In the same paper a reanalysis of increment scores of fifty-seven commercials tested in a three-position series by the Schwerin television testing method also showed a distinct U curve, despite the earlier contentions of the Schwerin organization. That real advertising materials presented in so short a series could produce distinct U curves seemed to confirm that the learning of advertising was similar to the learning of the nonsensical or the unimportant.⁷

What is common to the learning of the nonsensical and the

⁴ H. A. Zielske, "The Remembering and Forgetting of Advertising," *Journal of Marketing*, January 1959, pp. 239-43.

⁵ H. Ebbinghaus, *Grundzüge der Psychologie* (Leipzig: Veit, 1902).

⁶ C. I. Hovland et al., *The Order of Presentation in Persuasion* (New Haven: Yale University Press, 1957), p. 136.

⁷ H. E. Krugman, "An Application of Learning Theory to TV Copy-Testing," *Public Opinion Quarterly* 26 (1962): 626-34.

unimportant is lack of involvement. We seem to be saying, then, that much of the impact of television advertising is in the form of learning without involvement, or what Hartley calls "un-anchored learning."⁸ If this is so, is it a source of weakness or of strength to the advertising industry? Is it good or bad for our society? What are the implications for research on advertising effectiveness?

Let us consider some qualities of sensory perception with and without involvement. Last October I participated, along with Ray Bauer, Elihu Katz, and Nat Maccoby, in a Gould House seminar sponsored by the Foundation for Research on Human Behavior. Nat reported some studies conducted with Leon Festinger in which fraternity members learned a TV message better when hearing the audio and watching unrelated video than when they watched the speaker giving them the message directly, i.e., video *and* audio together.⁹ Apparently, the distraction of watching something unrelated to the audio message lowered whatever resistance there might have been to the message. As Nat put it, "Comprehension equals persuasion": Any disagreement ("Oh no! That can't be true!") with any message must come after some real interval, however minute. Ray asked Nat if he would accept a statement of this point as, "Perception precedes perceptual defense," and Nat agreed. The initial development of this view goes back before World War II to the psychologist W. E. Guthrie.¹⁰ It receives more recent support from British research on perception and communication, specifically that of D. E. Broadbent, who has noted the usefulness of defining perception as "immediate memory."¹¹

The historical importance of the Maccoby view, however, is

⁸ This is the title of a working manuscript distributed privately by E. L. Hartley in 1964, which concerns his experimentation with new methods of health education in the Philippines.

⁹ L. Festinger and N. Maccoby, "On Resistance to Persuasive Communications," *Journal of Abnormal and Social Psychology* 68 (1964): 359-66.

¹⁰ E. R. Guthrie, *The Psychology of Learning* (New York: Harper, 1935), p. 26.

¹¹ D. E. Broadbent, *Perception and Communication* (London: Pergamon Press, 1958), Ch. 9.

that it takes us almost all the way back to our older view of the potent propaganda content of World War I, that exposure to mass media content is persuasive per se! What is implied here is that in cases of involvement with mass media content perceptual defense is very briefly postponed, while in cases of noninvolvement perceptual defense may be absent.

Does this suggest that if television bombards us with enough trivia about a product we may be persuaded to believe it? On the contrary; it suggests that persuasion as such, i.e., overcoming a resistant attitude, is not involved at all, and that it is a mistake to look for it in our personal lives as a test of television's advertising impact. Instead, as trivia are repeatedly learned and repeatedly forgotten and then repeatedly learned a little more, it is probable that two things will happen: (1) more simply, that so-called "overlearning" will move some information out of short-term and into long-term memory systems, and (2) more complexly, that we will permit significant alterations in the *structure* of our perception of a brand or product, but in ways which may fall short of persuasion or of attitude change. One way we may do this is by shifting the relative salience of attributes suggested to us by advertising as we organize our perception of brands and products.

Thanks to Sherif we have long used the term "frame of reference," and Osgood in particular has impressed us with the fact that the meaning of an object may be perceived along many separate dimensions. Let us say that a number of frames of reference are available as the primary anchor for the percept in question. We may then alter the psychological salience of these frames or dimensions and shift a product seen primarily as "reliable" to one seen primarily as "modern."¹² The product is still seen as reliable and perhaps no *less* reliable than before, but this quality no longer provides the primary perceptual emphasis. Similarly, the product was perhaps previously seen as modern, and perhaps no *more* modern now—yet exposure to new or repeated messages may give modernity the primary role in the organization of the percept.

¹² Psychological salience was first discussed in this manner by E. L. Hartley, *Problems in Prejudice* (New York: Kings Crown Press, 1946), pp. 107-15.

There is no reason to believe that such shifts are completely limited to trivia. In fact, when Hartley first introduced the concept of psychological salience, he illustrated it with a suggestion that Hitler did not so much increase anti-Semitic attitudes in Germany as bring already existing anti-Semitic attitudes into more prominent use for defining the everyday world.¹³ This, of course, increased the probability of anti-Semitic behavior. While the shift in salience does not tell the whole story, it seems to be one of the dynamics operating in response to massive repetition. Although a rather simple dynamic, it may be a major one when there is no cause for resistance, or when uninvolved consumers do not provide their own perceptual emphases or anchors.

It may be painful to reject as incomplete, a model of the influence process of television advertising that requires changes in attitude *prior to* changes in behavior. It may be difficult to see how the viewer of television can go from perceptual impact directly to behavioral impact, unless *the full perceptual impact is delayed*. This would not mean going into unexplored areas. Sociologists have met "sleeper effects" before, and some psychologists have long asserted that the effects of "latent" learning are only or most noticeable at the point of reward. In this case, it would be at the behavioral level involved in product purchases rather than at some intervening point along the way. That is, the purchase situation is the catalyst that reassembles or brings out all the potentials for shifts in salience that have accumulated up to that point. The product or package is then suddenly seen in a new, "somehow different" light although nothing verbalizable may have changed *up to that point*. What we ordinarily call "change of attitude" may then occur after some real interval, however minute. Such change of attitude after product purchase is *not*, as has sometimes been said, in "rationalization" of the purchase but is an emergent response aspect of the previously changed perception. We would perhaps see it more often if products always lived up to expectations and did not sometimes create negative interference with the emerging response.

¹³ *Ibid.*, p. 97.

I have tried to say that the public lets down its guard to the repetitive commercial use of the television medium and that it easily changes its ways of perceiving products and brands and its purchasing behavior without thinking very much about it at the time of TV exposure or at any time prior to purchase, and without up to then changing verbalized attitudes. This adds up, I think, to an understandable success story for advertising's use of the television medium. Furthermore, this success seems to be based on a left-handed kind of public trust that sees no great importance in the matter.

But now I wonder about those so-called "limits of effectiveness" of the noncommercial use of the mass media. I wonder if we were not overusing attitudes and attitude changes as our primary criterion of effectiveness. In looking for behavioral changes, did we sometimes despair too soon simply because we did not find earlier attitude changes? I wonder if we projected our own attitudes and values too much onto the audiences studied and assumed that they, too, would treat information about such matters as the United Nations as serious and involving. I wonder also how many of those public-spirited campaigns ever asked their audiences to *do* something, i.e., asked for the kind of concrete behavior that at some point triggers whatever real potentials may have developed for an attitude change to begin or perhaps to complete its work.

I would like to suggest, therefore, that the distinction between the commercial and the noncommercial use of the mass media, as well as the distinction between "commercial" and "academic" research, has blinded us to the existence of two entirely different ways of experiencing and being influenced by mass media. One way is characterized by lack of personal involvement, which, while perhaps more common in response to commercial subject-matter, is by no means limited to it. The second is characterized by a high degree of personal involvement. By this we do *not* mean attention, interest, or excitement but the number of conscious "bridging experiences," connections, or personal references per minute that the viewer makes between his own life and the stimulus. This may vary from none to many.

The significance of conditions of low or high involvement is not that one is better than the other, but that the processes of communication impact are different. That is, there is a difference in the change processes that are at work. Thus, with low involvement, one might look for gradual shifts in perceptual structure, aided by repetition, activated by behavioral-choice situations, and *followed* at some time by attitude change. With high involvement, one would look for the classic, more dramatic, and more familiar conflict of ideas at the level of conscious opinion and attitude that precedes changes in overt behavior.

I think now we can appreciate again why Madison Avenue may be of little use in the Cold War or even in a medium-hot presidential campaign. The more common skills of Madison Avenue concern the change processes associated with low involvement, while the very different skills required for high-involvement campaigns are usually found elsewhere. However, although Madison Avenue generally seems to know its limitations, the advertising researchers tend to be less clear about theirs. For example, from New York to Los Angeles, researchers in television advertising are daily exacting "attitude change" or "persuasion" scores from captive audiences, these scores based on questionnaires and methods which, though plausible, have no demonstrated predictive validity. The plausibility of these methods rests on the presence of a more or less explicit model of communication effectiveness. Unfortunately, the model in use is the familiar one that assumes high involvement. Perhaps it is the questionnaires and the research procedures themselves that are responsible for creating what high involvement is present, which would not otherwise exist. The wiser or more cautious researchers meanwhile retreat to the possibilities of impersonal exactness in controlled field experiments and behavioral criteria. What has been left out, unfortunately, is the development of a low-involvement model and the pretest measures based on such a model. The further development of this model is an important next step, not only for the perhaps trivial world of television advertising but for the better understanding of all those areas of public opinion and edu-

cation which, socially important as they may be, may simply not be very involving to significant segments of the audience.

In time we may come to understand the effectiveness of mass media primarily in terms of the *consistency* with which a given campaign, commercial or noncommercial, employs talent and research sensitively attuned to the real level of audience involvement. In time, also, we may come to understand that behavior (that is, verbal behavior and overt behavior) is always consistent, provided we do not impose premature and narrowly conceived rules as to which must precede, or where, when, and how it must be measured.¹⁴

¹⁴ The consistency of verbal and overt behavior has also been reasserted by Hovland, who attributes pseudo-differences to those *research designs* which carelessly compare results of laboratory experiments with results of field surveys (C. I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," *American Psychologist* 14 [1959]: 8-17); by Campbell, who attributes pseudo-differences to the fact that verbal and overt behaviors have different situational thresholds (D. T. Campbell, "Social Attitudes and Other Acquired Behavioral Dispositions," in S. Koch, ed., *Psychology: A Study of a Science*, vol. 6 [New York: McGraw-Hill, 1963], pp. 94-172); and by Rokeach, who attributes pseudo-differences to the fact that overt behavior is the result of interaction between *two* sets of attitudes, one toward the object and one toward the situation, and that most research leaves one of the two attitudes unstudied (M. Rokeach, "Attitude Change and Behavior Change," paper presented at the annual conference of the World Association for Public Opinion Research, Dublin, September 9, 1965).

CARL I. HOVLAND

*Reconciling Conflicting Results
Derived from Experimental
and Survey Studies
of Attitude Change*

For a number of years the differing results of laboratory experiments and field survey research have been of concern to communication researchers. In most cases, large effects were obtained in the laboratory. In the field, this did not often occur. In fact, the difficulty of attributing *any* attitude changes to mass communication, in voting campaign studies and others, led Lazarsfeld and his associates to conclude that the mass media had little direct effect in such a campaign. In this paper, one of the leaders in communication research examines some of the reasons for these differing results. He points out that some effects simply cannot be studied by experimental designs in the field—for example, the effect of *Das Kapital* or *Uncle Tom's Cabin*—but that there are uses for both experiment and survey, and especially promising uses for field experiments. Dr. Hovland was chairman of the department of psychology at Yale. This paper was published and copyrighted by *The American Psychologist* 14 (1959): 8–17, and is reprinted by permission of that journal.

TWO QUITE DIFFERENT TYPES of research designs are characteristically used to study the modification of attitudes through communication. In the first type, the *experiment*, individuals are given a controlled exposure to a communication and the effects evaluated in terms of the amount of change in attitude or opinion produced. A base line is provided by means of a control group not exposed to the communication. The study of Gosnell on the influence of leaflets designed to get voters to the polls is a classic example of the controlled experiment.¹

In the alternative research design, the *sample survey*, information is secured through interviews or questionnaires both

¹ H. F. Gosnell, *Getting out the Vote: An Experiment in the Stimulation of Voting* (Chicago: University of Chicago Press, 1927).

concerning the respondent's exposure to various communications and his attitudes and opinions on various issues. Generalizations are then derived from the correlations obtained between reports of exposure and measurements of attitude. In a variant of this method, measurements of attitude and of exposure to communication are obtained during repeated interviews with the same individual over a period of weeks or months. This is the "panel method" extensively utilized in studying the impact of various mass media on political attitudes and on voting behavior.²

Generalizations derived from experimental and from correlational studies of communication effects are usually both reported in chapters on the effects of mass media and in other summaries of research on attitude, typically without much stress on the type of study from which the conclusion was derived. Close scrutiny of the results obtained from the two methods, however, suggests a marked difference in the picture of communication effects obtained from each. The object of my paper is to consider the conclusions derived from these two types of design, to suggest some of the factors responsible for the frequent divergence in results, and then to formulate principles aimed at reconciling some of the apparent conflicts.

Divergence

The picture of mass communication effects which emerges from correlational studies is one in which few individuals are seen as being affected by communications. One of the most thorough correlational studies of the effects of mass media on attitudes is that of Lazarsfeld, Berelson, and Gaudet, published in *The People's Choice*.³ In this report there is an extensive chapter devoted to the effects of various media, particularly radio, newspapers, and magazines. The authors conclude that

² Cf., e.g., Patricia L. Kendall and P. F. Lazarsfeld, "Problems in Survey Analysis," in R. K. Merton and P. F. Lazarsfeld, eds., *Continuities in Social Research: Studies in the Scope and Method of "The American Soldier"* (Glencoe, Ill.: The Free Press, 1950), pp. 133-96.

³ P. F. Lazarsfeld, B. Berelson, and Hazel Gaudet, *The People's Choice* (New York: Duell, Sloan, & Pearce, 1944).

few changes in attitudes were produced. They estimate that the political positions of only about 5 percent of their respondents were changed by the election campaign, and they are inclined to attribute even this small amount of change more to personal influence than to the mass media. A similar evaluation of mass media is made in the recent chapter in the *Handbook of Social Psychology* by Lipset and his collaborators.⁴

Research using experimental procedures, on the other hand, indicates the possibility of considerable modifiability of attitudes through exposure to communication. In both Klapper's survey⁵ and in my chapter in the *Handbook of Social Psychology*,⁶ a number of experimental studies are discussed in which the opinions of a third to a half or more of the audience are changed.

The discrepancy between the results derived from these two methodologies raises some fascinating problems for analysis. This divergence in outcome appears to me to be largely attributable to two kinds of factors: one, the difference in research design itself; and, two, the historical and traditional differences in general approach to evaluation characteristic of researchers using the experimental as contrasted with the correlational or survey method. I would like to discuss, first, the influence these factors have on the estimation of overall effects of communications and, then, turn to other divergences in outcome characteristically found by the use of the experimental and survey methodology.

Undoubtedly the most critical and interesting variation in the research *design* involved in the two procedures is that resulting from differences in definition of exposure. In an experiment the audience on whom the effects are being evaluated is one which is fully exposed to the communication. On the other

⁴ S. M. Lipset, P. F. Lazarsfeld, A. H. Barton, and J. Linz, "The Psychology of Voting: An Analysis of Political Behavior," in G. Lindzey, ed., *Handbook of Social Psychology*, vol. 2 (Cambridge, Mass.: Addison-Wesley, 1954), pp. 1124-75.

⁵ J. T. Klapper, *The Effects of Mass Media* (New York: Columbia University Bureau of Applied Social Research, 1949), mimeo.

⁶ C. I. Hovland, "Effects of the Mass Media of Communication," in G. Lindzey, ed., *Handbook of Social Psychology*, vol. 2, pp. 1062-1103.

hand, in naturalistic situations with which surveys are typically concerned, the outstanding phenomenon is the limitation of the audience to those who *expose themselves* to the communication. Some of the individuals in a captive audience experiment would, of course, expose themselves in the course of natural events to a communication of the type studied; but many others would not. The group which does expose itself is usually a highly biased one, since most individuals "expose themselves most of the time to the kind of material with which they agree to begin with."⁷ Thus one reason for the difference in results between experiments and correlational studies is that experiments describe the effects of exposure on the whole range of individuals studied, some of whom are initially in favor of the position being advocated and some who are opposed, whereas surveys primarily describe the effects produced on those already in favor of the point of view advocated in the communication. The amount of change is thus, of course, much smaller in surveys. Lipset and his collaborators make this same evaluation, stating:

As long as we test a program in the laboratory we always find that it has great effect on the attitudes and interests of the experimental subjects. But when we put the program on as a regular broadcast, we then note that the people who are most influenced in the laboratory tests are those who, in a realistic situation, do not listen to the program. The controlled experiment always greatly overrates effects, as compared with those that really occur, because of the self-selection of audiences.⁸

Differences in the second category are not inherent in the design of the two alternatives, but are characteristic of the way researchers using the two methods typically proceed.

The first difference within this class is in the size of the communication unit typically studied. In the majority of survey studies the unit evaluated is an entire program of communication. For example, in studies of political behavior an attempt is made to assess the effects of all newspaper reading and televi-

⁷ Lipset et al., "The Psychology of Voting," p. 1158.

⁸ Ibid.

sion viewing on attitudes toward the major parties. In the typical experiment, on the other hand, the interest is usually in some particular variation in the content of the communications, and experimental evaluations much more frequently involve single communications. On this point results are thus not directly comparable.

Another characteristic difference between the two methods is in the time interval used in evaluation. In the typical experiment the time at which the effect is observed is usually rather soon after exposure to the communication. In the survey study, on the other hand, the time perspective is such that much more remote effects are usually evaluated. When effects decline with the passage of time, the net outcome will, of course, be that of accentuating the effect obtained in experimental studies as compared with those obtained in survey researches. Again it must be stressed that the difference is not inherent in the designs as such. Several experiments, including our own on the effects of motion pictures⁹ and later studies on the "sleeper effect,"¹⁰ have studied retention over considerable periods of time.

Some of the difference in outcome may be attributable to the types of communicators characteristically used and to the motive-incentive conditions operative in the two situations. In experimental studies communications are frequently presented in a classroom situation. This may involve quite different types of factors from those operative in the more naturalistic communication situation with which the survey researchers are concerned. In the classroom there may be some implicit sponsorship of the communication by the teacher and the school administration. In the survey studies the communicators may often be remote individuals either unfamiliar to the recipients, or outgroups clearly known to espouse a point of view op-

⁹ C. I. Hovland, A. A. Lumsdaine, and F. D. Sheffield, *Experiments on Mass Communication* (Princeton: Princeton University Press, 1949).

¹⁰ C. I. Hovland and W. Weiss, "The Influence of Source Credibility on Communication Effectiveness," *Public Opinion Quarterly* 15 (1951): 635-50; H. C. Kelman and C. I. Hovland, "'Reinstatement' of the Communicator in Delayed Measurement of Opinion Change," *Journal of Abnormal and Social Psychology* 48 (1953): 327-35.

posed to that held by many members of the audience. Thus there may be real differences in communicator credibility in laboratory and survey researches. The net effect of the differences will typically be in the direction of increasing the likelihood of change in the experimental as compared with the survey study.

There is sometimes an additional situational difference. Communications of the type studied by survey researchers usually involve reaching the individual in his natural habitat, with consequent supplementary effects produced by discussion with friends and family. In the laboratory studies a classroom situation with low postcommunication interaction is more typically involved. Several studies, including one by Harold Kelly reported in our volume on *Communication and Persuasion*,¹¹ indicate that, when a communication is presented in a situation which makes group membership salient, the individual is typically more resistant to counternorm influence than when the communication is presented under conditions of low salience of group membership.¹²

A difference which is almost wholly adventitious is in the types of populations utilized. In the survey design there is, typically, considerable emphasis on a random sample of the entire population. In the typical experiment, on the other hand, there is a consistent overrepresentation of high school students and college sophomores, primarily on the basis of their greater accessibility. But, as Tolman has said, "college sophomores may not be people." Whether differences in the type of audience studied contribute to the differences in effect obtained with the two methods is not known.

Finally, there is an extremely important difference in the studies of the experimental and correlational variety with respect to the type of issue discussed in the communications. In the typical experiment we are interested in studying a set of factors or conditions which are expected on the basis of theory

¹¹ C. I. Hovland, I. L. Janis, and H. H. Kelley, *Communication and Persuasion* (New Haven: Yale University Press, 1953).

¹² E. Katz and P. F. Lazarsfeld, *Personal Influence* (Glencoe, Ill.: The Free Press, 1955), pp. 48-133.

to influence the extent of effect of the communication. We usually deliberately try to find types of issues involving attitudes which are susceptible to modification through communication. Otherwise, we run the risk of no measurable effects, particularly with small-scale experiments. In the survey procedures, on the other hand, socially significant attitudes which are deeply rooted in prior experience and involve much personal commitment are typically involved. This is especially true in voting studies which have provided us with so many of our present results on social influence. I shall have considerably more to say about this problem a little later.

The differences so far discussed have primarily concerned the extent of overall effectiveness indicated by the two methods: why survey results typically show little modification of attitudes by communication while experiments indicate marked changes. Let me now turn to some of the other differences in generalizations derived from the two alternative designs. Let me take as the second main area of disparate results the research on the effect of varying distances between the position taken by the communicator and that held by the recipient of the communication. Here it is a matter of comparing changes for persons who at the outset closely agree with the communicator with those for others who are mildly or strongly in disagreement with him. In the naturalistic situation studied in surveys, the typical procedure is to determine changes in opinion following reported exposure to communication for individuals differing from the communicator by varying amounts. This gives rise to two possible artifacts. When the communication is at one end of a continuum, there is little room for improvement for those who differ from the communication by small amounts, but a great deal of room for movement among those with large discrepancies. This gives rise to a spurious degree of positive relationship between the degree of discrepancy and the amount of change. Regression effects will also operate in the direction of increasing the correlation. What is needed is a situation in which the distance factor can be manipulated independently of the subject's initial position. An attempt to set up these conditions experimentally was made in a study by Pritz-

ker and the writer.¹³ The method involved preparing individual communications presented in booklet form so that the position of the communicator could be set at any desired distance from the subject's initial position. Communicators highly acceptable to the subjects were used. A number of different topics were employed, including the likelihood of a cure for cancer within five years, the desirability of compulsory voting, and the adequacy of five hours of sleep per night.

The amount of change for each degree of advocated change is shown in Figure 1. It will be seen that there is a fairly clear

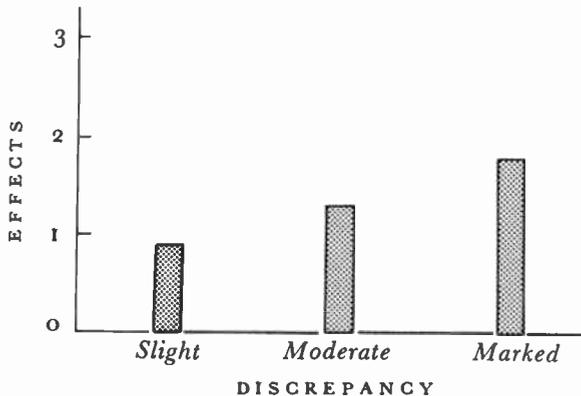


Figure 1. Mean opinion change score with three degrees of discrepancy (deviation between subject's position and position advocated in communication). [From Hovland & Pritzker, 1957.]

progression, such that the greater the amount of change advocated, the greater the average amount of opinion change produced. Similar results have been reported by Goldberg and by French.¹⁴

¹³ C. I. Hovland and H. A. Pritzker, "Extent of Opinion Change as a Function of Amount of Change Advocated," *Journal of Abnormal and Social Psychology* 54 (1957): 257-61.

¹⁴ S. C. Goldberg, "Three Situational Determinants of Conformity to Social Norms," *Journal of Abnormal and Social Psychology* 49 (1954): 325-29; J. R. P.

But these results are not in line with our hunches as to what would happen in a naturalistic situation with important social issues. We felt that here other types of response than change in attitude would occur. So Muzafer Sherif, O. J. Harvey, and the writer set up a situation to simulate as closely as possible the conditions typically involved when individuals are exposed to major social issue communications at differing distances from their own position.¹⁵ The issue used was the desirability of prohibition. The study was done in two states (Oklahoma and Texas) where there is prohibition or local option, so that the wet-dry issue is hotly debated. We concentrated on three aspects of the problem. How favorably will the communicator be received when his position is at varying distances from that of the recipient? How will what the communicator says be perceived and interpreted by individuals at varying distances from his position? What will be the amount of opinion change produced when small and large deviations in position of communication and recipient are involved?

Three communications, one strongly wet, one strongly dry, and one moderately wet, were employed. The results bearing on the first problem, of *reception*, are presented in Figure 2. The positions of the subjects are indicated on the abscissa in letters from A (extreme dry) to H (strongly wet). The positions of the communication are also indicated in the same letters, *B* indicating a strongly dry communication, *H* a strongly wet, and *F* a moderately wet. Along the ordinate there is plotted the percentage of subjects with each position on the issue who described the communication as "fair" and "unbiased." It will be seen that the degree of distance between the recipient and the communicator greatly influences the evaluation of the fairness of the communication. When a communication is directed at the pro-dry position, nearly all of the dry subjects consider it fair and impartial, but only a few percent of the wet subjects

French, Jr., "A Formal Theory of Social Power," *Psychological Review* 63 (1956): 181-94.

¹⁵ C. I. Hovland, O. J. Harvey, and M. Sherif, "Assimilation and Contrast Effects in Reactions to Communication and Attitude Change," *Journal of Abnormal and Social Psychology* 55 (1957): 244-52.

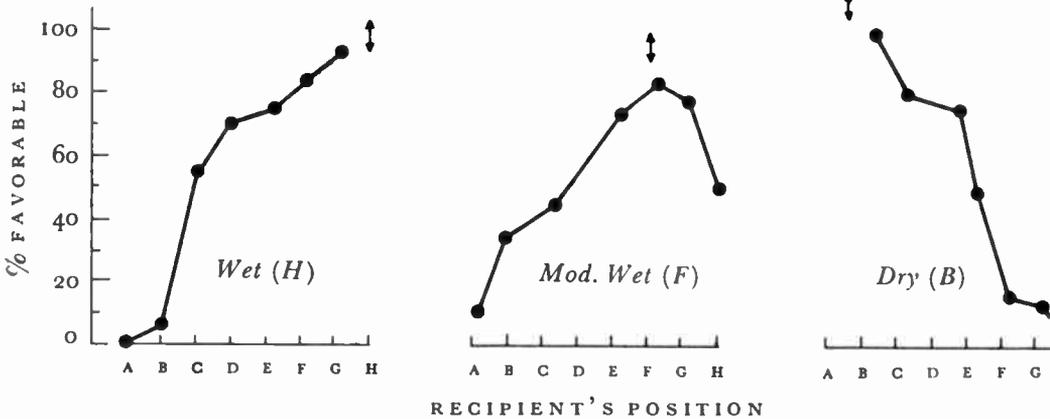


Figure 2. Percentage of favorable evaluations ("fair," "unbiased," etc.) of wet (*H*), moderately wet (*F*), and dry (*B*) communications for subjects holding various positions on prohibition. Recipients position range from *A* (very dry) to *H* (very wet). Position of communications indicated by arrow. [From Hovland, Harvey, & Sherif, 1957.]

consider the identical communication fair. The reverse is true at the other end of the scale. When an intermediate position is adopted, the percentages fall off sharply on each side. Thus under the present conditions with a relatively ambiguous communicator one of the ways of dealing with strongly discrepant positions is to *discredit* the communicator, considering him unfair and biased.

A second way in which an individual can deal with discrepancy is by distortion of what is said by the communicator. This is a phenomenon extensively studied by Cooper and Jahoda.¹⁶ In the present study, subjects were asked to state what position they thought was taken by the communicator on the prohibition question. Their evaluation of his position could then be analyzed in relation to their own position. These results are shown in Figure 3 for the moderately wet communica-

¹⁶ Eunice Cooper and Marie Jahoda, "The Evasion of Propaganda: How Prejudiced People Respond to Anti-Prejudice Propaganda," *Journal of Psychology* 23 (1947): 15-25, and in this volume.

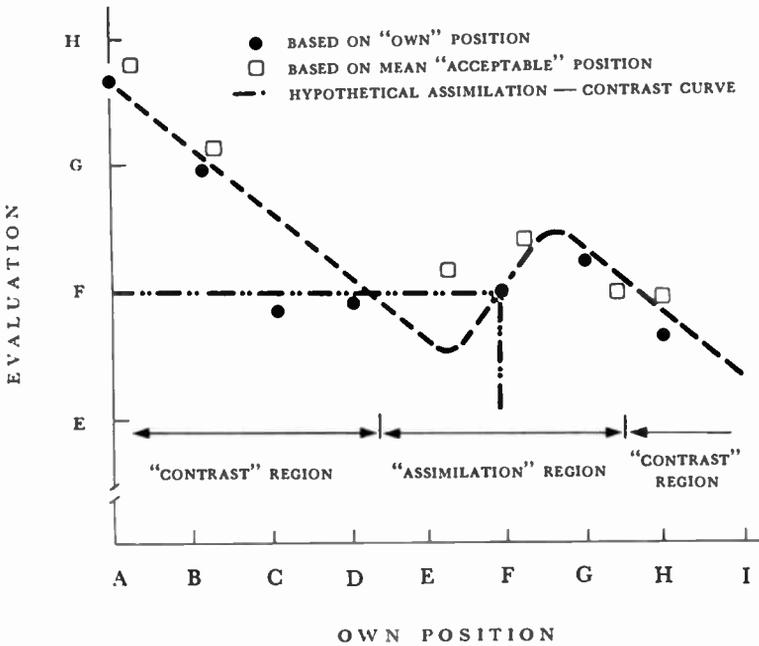


Figure 3. Average placement of position of moderately wet communication (*F*) by subjects holding positions on the issue, plotted against hypothetical assimilation-contrast curve. [From Hovland, Harvey, & Sherif, 1957.]

tion. It will be observed that there is a tendency for individuals whose position is close to that of the communicator to report on the communicator's position quite accurately, for individuals a little bit removed to report his position to be substantially more like their own (which we call an "assimilation effect"), and for those with more discrepant positions to report the communicator's position as more extreme than it really was. This we refer to as a "contrast effect."

Now to our primary results on opinion change. It was found that individuals whose position was only slightly discrepant from the communicator's were influenced to a greater extent than those whose positions deviated to a larger extent. When a

wet position was espoused, 28 percent of the middle-of-the-road subjects were changed in the direction of the communicator, as compared with only 4 percent of the dries. With the dry communication 14 percent of the middle-of-the-roaders were changed, while only 4 percent of the wets were changed. Thus more of the subjects with small discrepancies were changed than were those with large discrepancies.

These results appear to indicate that, under conditions when there is some ambiguity about the credibility of the communicator and when the subject is deeply involved with the issue, the greater the attempt at change, the higher the resistance. On the other hand, with highly respected communicators, as in the previous study with Pritzker using issues of lower involvement, the greater the discrepancy, the greater the effect. A study related to ours has just been completed by Zimbardo¹⁷ which indicates that, when an influence attempt is made by a strongly positive communicator (i.e., a close personal friend), the greater the discrepancy, the greater the opinion change, even when the experimenter made a point of stressing the great importance of the subject's opinion.

The implication of these results for our primary problem of conflicting results is clear. The types of issues with which most experiments deal are relatively uninvolved and are often of the variety where expert opinion is highly relevant, as for example, on topics of health, science, and the like. Here we should expect that opinion would be considerably affected by communications and, furthermore, that advocacy of positions quite discrepant from the individual's own position would have a marked effect. On the other hand, the types of issues most often utilized in survey studies are ones which are very basic and involve deep commitment. As a consequence, small changes in opinion due to communication would be expected. Here communication may have little effect on those who disagree at the outset and function merely to strengthen the position already held, in line with survey findings.

¹⁷ P. G. Zimbardo, *Involvement and Communication Discrepancy as Determinants of Opinion Change* (unpublished Ph.D. dissertation, Yale University, 1959).

A third area of research in which somewhat discrepant results are obtained by the experimental and survey methods is in the role of order of presentation. From naturalistic studies the generalization has been widely adopted that primacy is an extremely important factor in persuasion. Numerous writers have reported that what we experience first has a critical role in what we believe. This is particularly stressed in studies of propaganda effects in various countries when the nation getting across its message first is alleged to have a great advantage and in commercial advertising where "getting a beat on the field" is stressed. The importance of primacy in political propaganda is indicated in the following quotation from Doob:

The propagandist scores an initial advantage whenever his propaganda reaches people before that of his rivals. Readers or listeners are then biased to comprehend, forever after, the event as it has been initially portrayed to them. If they are told in a headline or a flash that the battle has been won, the criminal has been caught, or the bill is certain to pass the legislature, they will usually expect subsequent information to substantiate this first impression. When later facts prove otherwise, they may be loath to abandon what they believe to be true until perhaps the evidence becomes overwhelming.¹⁸

A recent study by Katz and Lazarsfeld utilizing the survey method compares the extent to which respondents attribute major impact on their decisions about fashions and movie attendance to the presentations to which they were first exposed.¹⁹ Strong primacy effects are shown in their analyses of the data.

We have ourselves recently completed a series of experiments oriented toward this problem. These are reported in our new monograph on *Order of Presentation in Persuasion*.²⁰ We find that primacy is often *not* a very significant factor when the relative effectiveness of the first side of an issue is compared ex-

¹⁸ L. W. Doob, *Public Opinion and Propaganda* (New York: Holt, 1948).

¹⁹ E. Katz and P. F. Lazarsfeld, *Personal Influence* (Glencoe, Ill.: The Free Press, 1955).

²⁰ C. I. Hovland, et al., *The Order of Presentation in Persuasion* (New Haven: Yale University Press, 1957).

perimentally with that of the second. The research suggests that differences in design may account for much of the discrepancy. A key variable is whether there is exposure to both sides or whether only one side is actually received. In naturalistic studies the advantage of the first side is often not only that it is first but that it is often then the only side of the issue to which the individual is exposed. Having once been influenced, many individuals make up their mind and are no longer interested in other communications on the issue. In most experiments on order of presentation, on the other hand, the audience is systematically exposed to both sides. Thus, under survey conditions, self-exposure tends to increase the impact of primacy.

Two other factors to which I have already alluded appear significant in determining the amount of primacy effect. One is the nature of the communicator, the other the setting in which the communication is received. In our volume Luchins presents results indicating that, when the same communicator presents contradictory material, the point of view read first has more influence. On the other hand, Mandell and I show that, when two different communicators present opposing views successively, little primacy effect is obtained. The communications setting factor operates similarly. When the issue and the conditions of presentation make clear that the points of view are controversial, little primacy is obtained.

Thus in many of the situations with which there had been great concern as to undesirable effects of primacy, such as in legal trials, election campaigns, and political debate, the role of primacy appears to have been exaggerated, since the conditions there are those least conducive to primacy effects: the issue is clearly defined as controversial, the partisanship of the communicator is usually established, and different communicators present the opposing sides.

Time does not permit me to discuss other divergences in results obtained in survey and experimental studies, such as those concerned with the effects of repetition of presentation, the relationship between level of intelligence and susceptibility to attitude change, or the relative impact of mass media and personal influence. Again, however, I am sure that detailed analy-

sis will reveal differential factors at work which can account for the apparent disparity in the generalizations derived.

Integration

On the basis of the foregoing survey of results I reach the conclusion that no contradiction has been established between the data provided by experimental and correlational studies. Instead it appears that the seeming divergence can be satisfactorily accounted for on the basis of a different definition of the communication situation (including the phenomenon of self-selection) and differences in the type of communicator, audience, and kind of issue utilized.

But there remains the task of better integrating the findings associated with the two methodologies. This is a problem closely akin to that considered by the members of the recent Social Science Research Council summer seminar, "Narrowing the Gap between Field Studies and Laboratory Studies in Social Psychology."²¹ Many of their recommendations are pertinent to our present problem.

What seems to me quite apparent is that a genuine understanding of the effects of communications on attitudes requires both the survey and the experimental methodologies. At the same time there appear to be certain inherent limitations of each method which must be understood by the researcher if he is not to be blinded by his preoccupation with one or the other type of design. Integration of the two methodologies will require on the part of the experimentalist an awareness of the narrowness of the laboratory in interpreting the larger and more comprehensive effects of communication. It will require on the part of the survey researcher a greater awareness of the limitations of the correlational method as a basis for establishing causal relationships.

The framework within which survey research operates is most adequately and explicitly dealt with by Berelson, Lazars-

²¹ H. W. Riecken, chairman, "Narrowing the Gap between Field Studies and Laboratory Experiments in Social Psychology: A Statement by the Summer Seminar," *Items of the Social Science Research Council* 8 (1954): 37-42.

feld, and McPhee in their book, *Voting*.²² The model which they use, taken over by them from the economist Tinbergen, is reproduced in the top half of Figure 4. For comparison, the model used by experimentalists is presented in the lower half of the figure. It will be seen that the model used by the survey researcher, particularly when he employs the panel method, stresses the large number of simultaneous and interacting influences affecting attitudes and opinions. Even more significant is

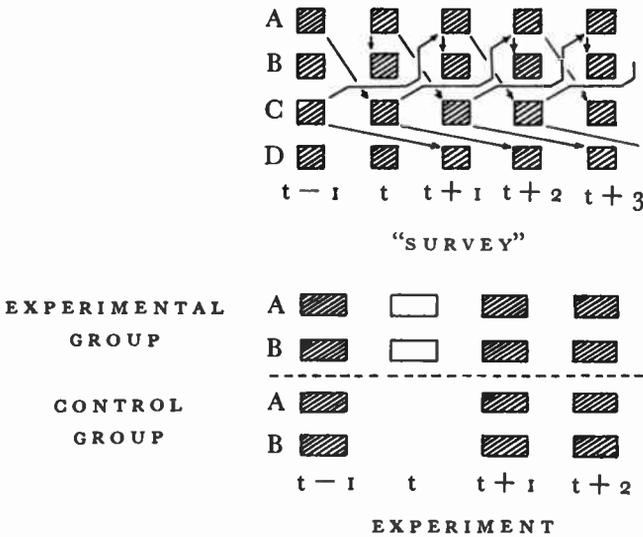


Figure 4. TOP HALF: "Process analysis" schema used in panel research. (Successive time intervals are indicated along abscissa. Letters indicate the variables under observation. Arrows represent relations between the variables.) [From Berelson, Lazarsfeld, & McPhee, 1954.]

BOTTOM HALF: Design of experimental research. (Letters on vertical axis again indicate variables being measured. Unshaded box indicates experimentally manipulated treatment and blank absence of such treatment. Time periods indicated as in top half of chart.)

²² B. Berelson, P. F. Lazarsfeld, and W. N. McPhee, *Voting: A Study of Opinion Formation in a Presidential Campaign* (Chicago: University of Chicago Press, 1954).

its provision for a variety of feedback phenomena in which consequences wrought by previous influences affect processes normally considered as occurring earlier in the sequence. The various types of interaction are indicated by the placement of arrows showing direction of effect. In contrast the experimentalist frequently tends to view the communication process as one in which some single manipulative variable is the primary determinant of the subsequent attitude change. He is, of course, aware in a general way of the importance of context, and he frequently studies interaction effects as well as main effects; but he still is less attentive than he might be to the complexity of the influence situation and the numerous possibilities for feedback loops. Undoubtedly the real-life communication situation is better described in terms of the survey type of model. We are all familiar, for example, with the interactions in which attitudes predispose one to acquire certain types of information, that this often leads to changes in attitude which may result in further acquisition of knowledge, which in turn produces more attitude change, and so on. Certainly the narrow question sometimes posed by experiments as to the effect of knowledge on attitudes greatly underestimates these interactive effects.

But while the conceptualization of the survey researcher is often very valuable, his correlational research design leaves much to be desired. Advocates of correlational analysis often cite the example of a science built on observation exclusively without experiment: astronomy. But here a very limited number of space-time concepts are involved and the number of competing theoretical formulations is relatively small so that it is possible to limit alternative theories rather drastically through correlational evidence. But in the area of communication effects and social psychology generally the variables are so numerous and so intertwined that the correlational methodology is primarily useful to suggest hypotheses and not to establish casual relationships.²³ Even with the much simpler relationships involved in biological systems there are grave

²³ Hovland, Lumsdaine, and Sheffield, *Experiments on Mass Communication*, pp. 329-40; Eleanor E. Maccoby, "Pitfalls in the Analysis of Panel Data: A Re-

difficulties of which we are all aware these days when we realize how difficult it is to establish through correlation whether eating of fats is or is not a cause of heart disease or whether or not smoking is a cause of lung cancer. In communications research the complexity of the problem makes it inherently difficult to derive causal relationships from correlational analysis where experimental control of exposure is not possible. And I do not agree with my friends the Lazarsfelds concerning the effectiveness of the panel method in circumventing this problem since parallel difficulties are raised when the relationships occur over a time span.²⁴

These difficulties constitute a challenge to the experimentalist in this area of research to utilize the broad framework for studying communication effects suggested by the survey researcher, but to employ well-controlled experimental design to work on those aspects of the field which are amenable to experimental manipulation and control. It is, of course, apparent that there are important communication problems which cannot be attacked directly by experimental methods. It is not, for example, feasible to modify voting behavior by manipulation of the issues discussed by the opposed parties during a particular campaign. It is not feasible to assess the effects of communications over a very long span of time. For example, one cannot visualize experimental procedures for answering the question of what has been the impact of the reading of *Das Kapital* or *Uncle Tom's Cabin*. These are questions which can be illuminated by historical and sociological study but cannot be evaluated in any rigorous experimental fashion.

But the scope of problems which do lend themselves to experimental attack is very broad. Even complex interactions can be fruitfully attacked by experiment. The possibilities are clearly shown in studies like that of Sherif and Sherif on factors influencing cooperative and competitive behavior in a camp for

search Note on Some Technical Aspects of Voting." *American Journal of Sociology* 59 (1956): 359-62.

²⁴ Kendall and Lazarsfeld, "Problems of Survey Analysis."

adolescent boys.²⁵ They were able to bring under manipulative control many of the types of interpersonal relationships ordinarily considered impossible to modify experimentally, and to develop motivations of an intensity characteristic of real-life situations. It should be possible to do similar studies in the communication area with a number of the variables heretofore only investigated in uncontrolled naturalistic settings by survey procedures.

In any case it appears eminently practical to minimize many of the differences which were discussed above as being not inherent in design but more or less adventitiously linked with one or the other method. Thus there is no reason why more complex and deeply involving social issues cannot be employed in experiments rather than the more superficial ones more commonly used. The resistance to change of socially important issues may be a handicap in studying certain types of attitude change; but, on the other hand, it is important to understand the lack of modifiability of opinion with highly involving issues. Greater representation of the diverse types of communicators found in naturalistic situations can also be achieved. In addition, it should be possible to do experiments with a wider range of populations to reduce the possibility that many of our present generalizations from experiments are unduly affected by their heavy weighting of college student characteristics, including high literacy, alertness, and rationality.

A more difficult task is that of experimentally evaluating communications under conditions of self-selection of exposure. But this is not at all impossible in theory. It should be possible to assess what demographic and personality factors predispose one to expose oneself to particular communications and then to utilize experimental and control groups having these characteristics. Under some circumstances the evaluation could be made on only those who select themselves, with both experimental and control groups coming from the self-selected audience.

Undoubtedly many of the types of experiments which could

²⁵ M. Sherif and Carolyn W. Sherif, *Groups in Harmony and Tension: An Integration of Studies on Intergroup Relations*. (New York: Harper, 1953).

be set up involving or simulating naturalistic conditions will be too ambitious and costly to be feasible, even if possible in principle. This suggests the continued use of small-scale experiments which seek to isolate some of the key variables operative in complex situations. From synthesis of component factors, prediction of complex outcomes may be practicable. It is to this analytic procedure for narrowing the gap between laboratory and field research that we have devoted major attention in our research program. I will merely indicate briefly here some of the ties between our past work and the present problem.

We have attempted to assess the influence of the communicator by varying his expertness and attractiveness, as in the studies by Kelman, Weiss, and the writer.²⁶ Further data on this topic were presented earlier in this paper.

We have also been concerned with evaluating social interaction effects. Some of the experiments on group affiliation as a factor affecting resistance to counternorm communication and the role of salience of group membership by Hal Kelley and others are reported in *Communication and Persuasion*.²⁷

Starting with the studies carried out during the war on orientation films by Art Lumsdaine, Fred Sheffield, and the writer,²⁸ we have had a strong interest in the duration of communication effects. Investigation of effects at various time intervals has helped to bridge the gap between assessment of immediate changes with those of longer duration like those involved in survey studies. More recent extensions of this work have indicated the close relationship between the credibility of the communicator and the extent of postcommunication increments, or "sleeper effects."²⁹

The nature of individual differences in susceptibility to persuasion via communication has been the subject of a number of

²⁶ Hovland and Weiss, "The Influence of Source Credibility on Communication Effectiveness"; Kelman and Hovland, "'Reinstatement' of the Communicator in Delayed Measurement of Opinion Change."

²⁷ Hovland, Janis, and Kelley, *Communication and Persuasion*.

²⁸ Hovland, Lumsdaine, and Sheffield, *Experiments on Mass Communication*.

²⁹ Hovland and Weiss, "The Influence of Source Credibility on Communication Effectiveness"; Kelman and Hovland, "'Reinstatement' of the Communicator in Delayed Measurement of Opinion Change."

our recent studies. The generality of persuasibility has been investigated by Janis and collaborators and the development of persuasibility in children has been studied by Abelson and Lesser. A volume concerned with these audience factors to which Janis, Abelson, Lesser, Field, Rife, King, Cohen, Linton, Graham, and the writer have contributed appears under the title *Personality and Persuasibility*.³⁰

Last, there remains the question of how the nature of the issues used in the communication affects the extent of change in attitude. We have only made a small beginning on these problems. In the research reported in *Experiments on Mass Communication*, we showed that the magnitude of effects was directly related to the type of attitude involved: film communications had a significant effect on opinions related to straightforward interpretations of policies and events, but had little or no effect on more deeply entrenched attitudes and motivations. Further work on the nature of issues is represented in the study by Sherif, Harvey, and the writer which was discussed above.³¹ There we found a marked contrast between susceptibility to influence and the amount of ego-involvement in the issue. But the whole concept of ego-involvement is a fuzzy one, and here is an excellent area for further work seeking to determine the theoretical factors involved in different types of issues.

With this brief survey of possible ways to bridge the gap between experiment and survey, I must close. I should like to stress in summary the mutual importance of the two approaches to the problem of communication effectiveness. Neither is a royal road to wisdom, but each represents an important emphasis. The challenge of future work is one of fruitfully combining their virtues so that we may develop a social psychology of communication with the conceptual breadth provided by correlational study of process and with the rigorous but more delimited methodology of the experiment.

³⁰ I. L. Janis et al., *Personality and Persuasibility* (New Haven: Yale University Press, 1959).

³¹ Hovland, Harvey, and Sherif, "Assimilation and Contrast Effects in Reactions to Communication and Attitude Change."

B. SOCIAL EFFECTS

INTRODUCTION

Social Consequences of Mass Communications

IN LIGHT of the early fears about the impact of mass communications on society—fears that the mass audience would be at the mercy of the mass media, their beliefs and values molded and their behavior directed by those who controlled the presses and air waves—research over the past few decades has produced heartening results. Indeed, since World War II, mass communication research has tended to replace the image of an extremely malleable mass audience with a picture of a collection of subaudiences almost as extreme in their resistance to influence from the mass media as they were originally thought to be susceptible.

The failure to demonstrate radical changes in social behavior following from mass communication campaigns has led a great many communication researchers to conclude that the primary effect of the mass media is maintenance of the status quo. Two of the major generalizations which emerge from Joseph Klapper's comprehensive review of mass communication research, *The Effects of Mass Communications* (The Free Press, 1960), are that the mass media typically serve to reinforce existing conditions, and that when the mass media do function in the service of change it is because the normally functioning mediating factors are inoperative or because they are, in and of themselves, impelling toward change.

It is difficult to argue with such generalizations. Few, if any, examples of radical changes in basic beliefs, values, or behavior deriving directly from mass communications have been demonstrated. Moreover, it is clear that mass communications are seldom, if ever, the sole agent behind any change. Rather, they function as just one element in a highly complex social system; their impact is moderated and mediated by numerous other factors in the system. In short, whatever the consequences of

mass communications, it would be a mistake to conceive of them as anything other than a contributing influence.

On the other hand, generalizations such as the preceding risk the danger of leading us to underestimate those contributions to social behavior which the mass media do make. For example, the status quo which the media serve to maintain can be characterized as normative means for dealing with the environment. This, in turn, implies that changes in the environment require changes in the status quo—in effect, the establishment of a new status quo. If we are willing to concede that for most of us the mass media function as the primary link with a large proportion of the “environment,” and that changes in this environment are occurring at a rapidly increasing rate, then it is difficult to believe that mass communications do not exert a strong influence on social behavior. In other words, to the extent that other factors in the social system impelling toward change seem to manifest themselves more and more frequently, mass communications have more and more opportunity to contribute to social effects.

The civil rights movement over the past fifteen years provides a good case in point. Obviously numerous factors having little or nothing to do with the mass media influenced the formation and development of the civil rights movement. Changes in the political, legal, economic, and social environment all contributed to the movement's genesis. Yet it is not unreasonable to argue that the struggle for minority rights would not have developed as rapidly or in the manner that it did had it not been for mass communications. Although a variety of conditions generated the early boycotts and demonstrations in the South, the mass communication media certainly served to inform people all across the nation that the forces for change were operative, that the time to act had come—clearly a consequence of mass communications not to be underestimated.

There is also the argument that mass communications engender social consequences not only by reporting on changes in the environment, and thereby reinforcing existing forces for change, but also by creating and/or shaping our impressions of various aspects of the environment through selective presenta-

tions and through emphasizing or deemphasizing certain themes. Melvin DeFleur, in his book *Theories of Mass Communication* (McKay, 1970), labels this approach to mass communication effects the "Cultural Norms Theory." Basically, this theory posits that because the mass media are often the primary source of information about many parts of the world, and because media coverage imparts a kind of status or validity to whatever is presented, mass communications have the power to shape our impression of many situations and our conception of norms for behavior in those situations. DeFleur writes that the media "are said to provide a 'definition of the situation' which the actor believes to be real. This definition provides guides for action which appear to be approved and supported by society" (p. 130).

One common example of how this theory applies to mass communications lies in the area of the effect, on children, of mass media depictions of violence. Many social critics argue that the significant effect of portrayals of violence is not that such scenes necessarily increase the level of hostility among viewers or that they motivate an immediate motivation to commit mayhem. Rather, they contend that television's frequent portrayals of violence (e.g., during one week in 1968, violence occurred in 80 percent of all prime time dramatic presentations) as a response to a wide variety of problems may act to teach children that aggressive behavior is an acceptable, even normative, behavior in problem situations. In other words, mass communications are viewed as having a significant (albeit indirect) influence on social behavior, to the extent that the way in which they define reality is accepted, even though it may be an incorrect definition.

The cultural norms theory of mass communication effects remains controversial because of problems in gathering data to test its causal predictions. While there is a good deal of face validity to the argument that frequent portrayals of violence may influence children, who lack other experience, to define aggression as an acceptable social norm, or that stereotyped portrayals of minority groups will create false and possibly disastrous expectations among members of the audience who have little di-

rect contact with minorities, it is nevertheless difficult to separate the influence of the media from the influence of the myriad other forces working in society. How are we to say that the teenager who tends to resort to force to solve problems does so because he was to some degree influenced by the television he watched as a younger child? Perhaps his father taught him to fight for what he wanted. Perhaps violence is a value held by his peer group. Perhaps he would have behaved that way even if he had never seen television. Similarly, how are we to determine whether the stereotypes presented by the media are reflections of or causes of the stereotypes held by members of the audience? These are questions which, at present, cannot be answered with the kind of empirical rigor we would like. We are not yet capable of separating the causal contribution of one variable (e.g., mass communications) from that of many others when working at the social systems level. We have not yet begun to conduct the long-term, cumulative studies that are needed to gather data on long-term, cumulative consequences. It is clear, however, that they are questions that cannot and should not be avoided. The massive implications for social behavior of this approach to the effects of mass communications are too important to ignore.

In the five articles that follow we have attempted to illustrate some of the ways in which the social consequences of mass communications have been approached. The piece by Lazarsfeld and Merton examines potential functional and dysfunctional effects of mass communications on society as a whole. Their description of how the mass media facilitate the enforcement of social norms and of how they narcotize the audience such that they "mistake *knowing* about problems of the day for *doing* something about them" is one of the earliest and best articulated statements of how mass communications act to maintain the status quo. The articles by Wilbur Schramm and by Hadley Cantril demonstrate the enormous power of the mass media when other conditions in the environment have created a state of high uncertainty—when the need for information is greatly increased. "The Invasion from Mars," for example, occurred at a time when radio news was just becoming a highly respected

source of valid information and when uncertainty and nervousness over the impending war in Europe was rapidly increasing. Under these conditions a particular configuration of information, attitudes, uncertainty, and needs came together to activate a quite unexpected and dramatic response to the broadcast. Schramm's chapter presents some of the most lucid accounts available of how the media can serve to help maintain societal equilibrium at a time when a major change in the environment has occurred. President Kennedy's assassination was a radical change in the environment, and the mass media were uniquely suited to provide much of the information needed to adjust to that change.

Finally, the papers by Roberts and Schramm, and by Alberta Siegel, review research on the effects of the mass media on children. While the bulk of the material covered in these two pieces pertains to studies of short-term effects, both present a good deal of evidence that we should perhaps be most concerned with the long-term consequences of mass communications—with the kind of influence predicted by the cultural norms theory of mass communication effects.



WILBUR SCHRAMM

Communication in Crisis

For the three days following the assassination of President John Kennedy in 1963, the American mass communication system was largely given over to covering that event and its aftermath, and the audience behavior was truly extraordinary. During those days the average television receiver was tuned to the Kennedy report for a total of 31.6 hours, and almost three-quarters of all Americans watched the funeral and the funeral procession. What was the psychological reason for, and the effect of, this gathering of a nation around its mass media? Fortunately for communication research and theory, a national survey and at least fifteen local studies were put into the field to try to understand what had happened. Many of these were summed up in *The Kennedy Assassination and the American Public: Social Communication in Crisis*, edited by Bradley S. Greenberg and Edwin B. Parker, published by the Stanford University Press, © 1965 by the Board of Trustees of the Leland Stanford Junior University, by whose permission this introductory chapter is here reprinted. The author of the chapter is director of the Institute for Communication Research at Stanford University.

THE TITLE OF THIS PAPER may be misleading, because it appears to reify communication. Communication, of course, has no life of its own. It is something people do. It is a—perhaps *the*—fundamental process of society. The chief reason for studying it is to find out more about people and their societies. This book, therefore, is primarily about *people*, rather than communication, in crisis.

Yet because communication is one of the most common behaviors of man, and because in a crisis those who are responsible for information are deeply and powerfully involved, it is often possible in a time of crisis to see the social institutions and uses of communication in sharp outline and clear perspective. This is how one studies communication, not as a thing in itself, but rather as a window on man and society, which in turn throws light on the acts and organizations of communicating.

The articles in this book, then, are about the reaction of the

American people to the critical and shocking events beginning with the assassination of President John F. Kennedy, and, in particular, how the flow of information through society helped shape that reaction.

The Crisis

The uniqueness of the happenings of November 22, 1963, and the days following has been often remarked. Yet it remains to say just what makes them unique. It was, of course, not the first assassination of an American president. Many people still alive remember the shock of McKinley's assassination in 1901, and a few must recall Garfield's twenty years earlier. A very few may still remember Lincoln's in 1865. Nor was the reaction to Kennedy's murder the first national outpouring of sorrow over the death of a chief executive within memory of a large proportion of Americans. The memory of Franklin D. Roosevelt's death, in 1945, is still fresh in the minds of most Americans over twenty-five, and, as newspaper accounts and the few available studies show, many of the reactions at that time were much like those of November, 1963.¹

The unique quality of the events we are talking about arose from their surrounding circumstances. For one thing, the man struck down was an extraordinarily young and vital President, who, together with his beautiful wife and attractive children, had become well known in an unusually personal and intimate way through the mass media. Franklin Roosevelt had been struck down in the fullness of years and accomplishment. His loss, to a greater degree than John Kennedy's, must have been that of a father surrogate. Kennedy must have seemed less a father figure than a leader figure, and his loss focused attention, unconfused by the venerability of age or the psychological complications of father imagery, on what a *leader* means to Americans.

¹ H. Orlansky, "Reactions to the Death of President Roosevelt," *Journal of Social Psychology* 26 (1947): 236-66; D. E. Johannsen, "Reactions to the Death of President Roosevelt," *Journal of Abnormal and Social Psychology* 41 (1946): 218-22.

In the course of a nationwide survey during the week following the assassination, over 1,300 respondents were asked what other experiences they were reminded of by their feelings when they heard the news about President Kennedy. The majority said they "could not recall any other times in their lives" when they had the same sort of feelings. Of those who could think of similar feelings, most mentioned the death of someone near and dear to them, about 8 percent mentioned Pearl Harbor, and about one-fourth named the death of Franklin Roosevelt (Sheatsley and Feldman, "A National Survey of Public Reactions and Behavior").

The events in Dallas clearly had some of the impact of both Pearl Harbor and the death of Roosevelt, and yet the fact that so few people mentioned the resemblance shows that there were basic differences. Like Pearl Harbor, Dallas came suddenly, shockingly, unexpectedly; and it too bore a threat to national security and a blow to national pride, although less than Pearl Harbor. But Dallas was personified and focused on an individual in a way that Pearl Harbor was not. It was something we had done to ourselves rather than something done to us by a foreign enemy, and the disturbed ex-Marine and the impulsive nightclub-owner offered no such broad target for hatred as the foreign aggressor who dropped bombs on Hawaii. There were no immediate channels for working off one's grief and anger on November 22. After Pearl Harbor one could seek one's place, civilian or military, in the war effort; there was much to be done, and in general everyone knew what it was. But after November 22—well, one could think it over by oneself, or say a prayer, or try to talk out one's feelings, or watch television. This is doubtless a reason for the rather compulsive attention to television: not only was it therapeutic; it also provided something to do when no one knew just what to do.

News of the death of President Roosevelt, like news of the death of President Kennedy, caused deep grief, mass anxiety, and widespread rumors. In 1945 it was widely reported that Fiorello LaGuardia and Jack Benny had also died; in 1963 it was reported widely that Lyndon Johnson had suffered another

heart attack and that John McCormack had been slain.² But the death of Roosevelt had not been as completely unexpected as that of Kennedy. FDR's loss of weight, his weariness and grayness, had not been entirely hidden from the public. John Kennedy, on the other hand, was the epitome of youth, health, and vigor. When people talked about his future, they were more likely to wonder what he would do when he retired from the presidency in his early fifties than to wonder whether he would survive that long. John Kennedy was a life and immortality symbol; the destruction of that symbol by violence was all the more shocking. Violence was missing from the story of Roosevelt's demise; as it must to all men, death came to him. But John Kennedy was jerked away from health, from a young family, from leadership, by a senseless act of violence.

It is of considerable importance that these events should have occurred in the full bloom of the Age of Television. President Kennedy's loss was the first loss of a national leader reported in any such detail on the picture tubes of a nation. President Harding's death, in 1923, came at the very beginning of the Age of Radio; both information and transportation were so slow that the impact was diffused. Roosevelt's death came when radio was well developed, but amidst the great distractions of war news and national preoccupation with wartime duties and casualty lists. The Kennedy story, however, was carried into more than 90 percent of American homes by television so quickly that over half of all Americans apparently heard the news before the President was pronounced dead, only thirty minutes after the shooting, and so fully that millions of Americans actually saw Oswald killed and heard the shot as soon as it echoed through the basement of the Dallas courthouse. Immediacy was one striking quality of the information flow during those days of crisis; another was the pervasiveness of it. For all practical purposes there was no other news story in America during those four days, and all the mass media concentrated on telling it. There were times during those days when *a majority of all Americans* were apparently looking at the same events and hearing the same words from their television sets—

² Ibid.

participating together, at least to that extent, in a great national event. Nothing like this on such a scale had ever occurred before. And if anything of significance connected with these events was not seen or heard at the instant it occurred, it was sure to be seen or heard or read shortly thereafter by almost everyone who could see, hear, or read. Never before, it is safe to say, has such a large proportion of the American people been able to feel so instantly and closely, for three and a half days, a part of events and deeds of great national significance.

These events were unique also because they represented the first such loss of a national leader that social scientists were ready to study. There was little or no social science in Lincoln's time, and the accounts by Sandburg and others can only suggest the opportunities that were missed to study social dynamics on that occasion. A few studies were made of reactions to Roosevelt's death, but the scholars who made them lamented that more data could not be gathered at the time. In 1963, however, social scientists were better able to seize opportunities. A series of studies of disasters had been made.³ These had established the pattern of being able to go into the field on short notice. Survey research centers had interviewers available and were prepared to draw samples and construct questionnaires quickly. Communication research had been considerably developed at enclaves of various kinds within a number of universities. When scholars recovered from the shock of the first news on November 22, many of them realized that this was a chapter in national history that should be studied, and they set plans in motion to collect information while it was still fresh. This was not a ghoulish act; rather, it was an effort to contribute to the understanding of great national events, and through them to the better understanding of a national society.

A surprising amount of research was planned and conducted in the week following November 22. A national sample survey and at least fifteen local studies were in the field within that time. Other studies were made later. This book represents by

³ For a summary, see A. H. Barton et al., *Social Organization under Stress: A Sociological Review of Disaster Studies* (Washington: National Academy of Sciences—National Research Council, 1963).

no means all of this research, although the editors have tried to represent the most interesting parts of it. Undoubtedly no unexpected event in our history has ever been so fully studied at the time it happened.

These studies confirm that the Kennedy story provided a stimulus more like the Roosevelt than the Pearl Harbor story, but with added overtones of violence and irony, and with full and vivid television coverage. Television, more than any of the other media, during the preceding years must have made Americans feel that they knew the Kennedys very well. To the American people the event was clearly a signal for grief and national mourning for a man who was as close at hand as the picture tube but still not close enough for people to do the usual things they do about the death of a loved person. In this respect, too, television found itself playing an unusual part in the lives of its viewers.

There is relatively little previous scholarship about such an event. We have mentioned the series of studies on disaster. There are also studies of persons under stress.⁴ There has been some attention to the behavior of personal bereavement and to the clinical nature of grief.⁵ But these are only tangentially related to what happened on November 22, 1963, and the days following. That remains in most respects a unique event, in our scholarship as in our history, and the papers in this volume are therefore plowing new fields.

The Part Communication Plays in Crisis

When a crisis interrupts the slow, ongoing rhythms of communication—scanning the environment, disposing of the day-to-day needs and problems of the system, filing away and sharing the increment of experience—the rate of information flow is enormously increased. A message signals the emergency. Information rushes to and from the point of crisis, which be-

⁴ For example, see I. L. Janis, *Air War and Emotional Stress* (New York, 1951).

⁵ For example, E. Lindemann, "Symptomatology and Management of Acute Grief," *American Journal of Psychiatry* 101 (1948): 141-48, and G. L. Engel, "Is Grief a Disease?" *Psychosomatic Medicine* 23 (1961): 18-23.

comes a new focus of attention as the system strives to adjust to the problem.

This is the case regardless of the size of system. A message that unusual heat is being felt on a finger will alert a human system to move the finger, check the situation visually if possible, take steps to repair the damage, and so forth. A message that one member of a group is deviating will interrupt the usual humdrum communication of the group for a great flow of persuasion to the deviant until he is restored to loyal membership or the cause is seen to be hopeless. So in Dallas on November 22 the reporters, broadcasters, photographers, and their equipment were operating routinely until 12:30. They were providing routine coverage of a chief executive. Then came the bulletin that roused the men and facilities of communication to such efforts that it was many days before information from Dallas and the coverage of the American chief executive could again be called routine.

The National Research Council's studies of disaster identified five stages in society's response to crisis. These are (1) the predisaster period, (2) the period of detection and communication of a specific threat, (3) the period of immediate, relatively unorganized response, (4) the period of organized social response, and (5) the long-run postdisaster period when the society is restored to equilibrium and the "permanent" effects of the disaster have been incorporated into it.⁶ Each of these periods has its own kind of communication to meet its special needs. The pattern, however, fits great disasters and accidents better than it fits the events that concern us here. There is no warning of an assassination, as there is of a tornado, and thus no period in which people can prepare, physically or psychologically, to meet the threat. There is no widespread need for physical help or relief, as in most disasters. Indeed, one of the characteristics of the events of November 22-25 was that there were no organized activities for most people to take part in; the widespread response to the suggestion that the slain policeman's wife, and later Mrs. Oswald, needed money, may have been an indication that organized social actions in time of crisis

⁶ See Barton et al., *Social Organization under Stress*, pp. 14-15.

are themselves therapeutic. Another difference between the Kennedy assassination and most of the crises studied for the National Research Council was that in November of 1963 there was no widespread destruction of the sort on which the analysts of disaster research base hypotheses relating the amount of communication to the amount of destruction seen. Except for the three dead men in Dallas, the casualties of the events we are considering were psychological and political.

Systems theory would describe the response to crisis as a sudden imbalance in the system, followed by emergency steps to restore balance, and then a gradual restoration of normal functioning around whatever new balance is achieved.⁷ This comes closer to describing what seems to have happened in the case of the Kennedy assassination. We can identify three periods. First came the time when the news had to be told. Then followed a period when society staggered under the blow but struggled to restore equilibrium—the shocked response of ordinary men and women, the shocked but disciplined response of officials striving to maintain law, order, and government. And finally came a period of social reintegration: the government closed ranks around a new chief, and the people overcame their shock, expiated their grief, and returned to old responsibilities in a new situation.

Each of these periods, as we have suggested, made its own special demands for communication. At 12:30 on November 22 the machinery of newsgathering was suddenly jarred out of its routine. The first staccato bulletin from Dallas was followed by a veritable ocean of telephoned news, wire copy, radio, television, and film, until all sides of the monstrous events had been filled in, and the chief actors had moved or been moved elsewhere.

This roused two great waves of communication in response. About one of these we know relatively little, and probably shall continue to know little until the autobiographies and the "now it can be told" articles begin to appear. This was the

⁷ For example, L. Bertalanffy, "General Systems Theory: A Critical Review," *Yearbook of the Society for General Systems Research* 7 (1962): 1-22, and K. E. Boulding, *The Image* (Ann Arbor, 1956).

great and urgent flow of administrative communication, beginning in front of the Texas School Book Depository and the Parkland Hospital, and speedily involving the local and national police agencies, the White House, and Congress as officialdom took the actions required to protect the new President, bring the murderers to justice, and arrange a farewell to the leader and an orderly transition of leadership. The Warren report has told us a little of what went on during that time, and it is possible to piece together other bits. For example, there was for a time a question whether the killing of the President was an isolated act or was part of a conspiracy that might strike other leaders in an effort to take over the government. Unlikely as it may seem, still this was a possibility that had to be recognized and guarded against.

About the other wave of response to the crisis news, however, we know a great deal. This was the great ground swell of grief aroused in the American people and to some extent in people of other countries. There were incredulous questions, as we know; there was anger, but less of it than one might have expected; there was a certain amount of anxiety and withdrawal, and a considerable feeling of need to "talk it over." There was apparently a compulsive need to glue oneself to television and thus vicariously take part in the events and the farewells. About this response of nonofficial America we know a great deal, and what we know is documented by the articles in this volume.

After the news of the crisis and the shocked official and unofficial responses, there was the longer period of reintegration, when society closed ranks again, resolved most of its doubts and questions, worked out its grief, and returned more or less to normal. Much of this, but by no means all, was accomplished by the end of the day when John Kennedy was laid to rest in Arlington. Some of the scars lingered. The enormous sale of the memorial books and pictures, and of the Warren Commission report nearly a year later, testifies to how long the memories and the questions have lingered.

Three periods, three different demands on communication. Throughout all three periods, but most urgently at first and

diminishing with time, was the demand for facts, for swift and full answers to the questions the nation was asking. Exactly what had happened in Dallas? How had it happened? Who had done it? Was he caught? Did they know he had done it? Was the Vice-President all right? Had he been sworn in? And so forth. That was the first demand—for facts. The second was for interpretation. This demand increased after the first shock, and it was still high enough to sell upwards of a million copies of the Warren report. How could it have happened? Why did he do it? Can we be sure of his guilt? What will this event mean for us all? These were the kinds of questions for which American society began to demand answers as soon as the first harsh news was absorbed. The demand for this kind of information was greatest in the third period, the period of reintegration; the demand for facts and bulletins was greatest in the first period, when the events were just becoming known. There was still another demand, which was perhaps highest in the second response period. This was the need to shake off the shock of the news, to talk or be talked to, to draw strength and reassurance from the groups and individuals one values, and to do something, even if it was no more than watching the television, to express one's grief. In other words, communication was called on for a kind of therapy, as it had been also for facts and meanings.

In all these uses of communication, mass and interpersonal uses were intertwined. The first news came by mass media, but half the people heard it first by word of mouth. Therapeutic communication was as likely to come from "talking it over" with one's friends or family as from watching the President's funeral on television. Interpretive communication was more likely to come from the media, but there were many amateur interpreters, and some surrendered their amateur status and began to lecture on the subject. Nevertheless, one of the things that distinguished the kind of communication in this crisis, as we have tried to point out, was the extraordinary amount of mass media coverage. The fact that the transition was so orderly and reintegration was accomplished so quickly must be credited in no small degree to the efficiency and amount of

media attention. The very fact that so little, apparently, was kept from the people of this country, that the channels of information were so constantly open, that representatives of the public were on the scene to report by press and broadcast, must have helped greatly to reduce the anxiety that would have been fed by a more secretive policy or less full coverage. The fact that most of the people of a nation felt that they could join together, even through television, in memorial services to a fallen leader must have helped greatly to expiate the grief and speed social reintegration. For these reasons, and because it is easier to assemble hard facts on the content and performance of mass media than on the content and uses of interpersonal communication, we shall emphasize the media in the remainder of this paper.

What the Media Did

The networks abandoned entertainment programs and commercials, and devoted themselves to the big story from Friday noon through Monday evening. Many of the smaller and independent stations did not abandon their usual programming after the first day; they had neither the program resources nor the financial security to do so.⁸ But the networks and network stations concentrated on the great story and its background. The newspapers covered it in extenso, and the wire services moved hundreds of thousands of words on it. From Friday noon until Monday evening, this was the story.

There has been a great deal of study of the content of mass media, but relatively little study of what happens between a news event and its appearance in the media. This is what fascinates us about the handling of a great story like the events in Dallas. How was it covered? How were the decisions made about what people to talk to, what questions to ask, what pictures to take? What concepts of public interest governed the choice of details? What standards of evidence determined when a report should be incorporated into the news? What is the dif-

⁸ K. J. Nestvold, "Oregon Radio-TV Response to the Kennedy Assassination," *Journal of Broadcasting* 8 (1964): 141-46.

ference between news coverage policies for press and for broadcast? Matters like these obviously determine what kind of lens the news media use to show us the world, but we know less than we should like to about them.⁹ It is therefore interesting and revealing to read the accounts by professionals in this volume describing how they covered the Kennedy story.

Anyone who believes that the coverage of a crisis is a routine and straightforward job should ponder over Part I of this book. Despite the size of the news corps accompanying the President, there were simply not enough professionals at the right places to cover the confused story for the number of bureaus, services, and networks represented. Those who could send in more men did so. In the broadcasting networks, as Lower says ("A Television Network Gathers the News"), every member of the news department and many members of other departments worked constantly for the better part of four days. Wicker ("That Day in Dallas") reported something that newspapermen ten years ago might not have admitted, that they often found television helpful: it gave them another pair of eyes where they could not be in person.

During the first hours the problem was to bring order out of confusion. Conflicting reports and wild rumors circulated. The new President was going to be sworn in when he returned to Washington—or while he was still in Dallas. (Actually it was on the plane before it left the Dallas airport.) The gun was a Mauser; it was an Italian make; it was several other kinds. *Two* heads had been seen at the window from which the assassin's bullets were reported to have come. Some of the shots were thought to have come from an overpass rather than the building. Oswald had been seen with Ruby. Oswald had been heard

⁹ There have been a few research studies in this area. Examples are M. Charnley's not very reassuring "A Study of Newspaper Accuracy," *Journalism Quarterly* 12 (1935): 349-401; a study by G. E. Lang and K. Lang of the MacArthur parade in Chicago, "The Unique Perspective of Television: A Pilot Study," *American Sociological Review* 18 (1953): 3-12, and in this volume, which demonstrates that television can convey an impression of an event that is quite different from what is seen by those present; and W. Breed's "The Newspaperman, News, and Society" (Ph.D. dissertation, Columbia University, 1952), which studies how policy is made and communicated in the city room. These are samples from a scant literature.

to say this and that. These and potentially more serious reports (for example, about the assassin's relation to foreign countries and to political groups in this country) were spoken as gospel truth and offered to reporters.

Consequently, a reporter on the Dallas story was from the very first up against one of the classical problems of journalism. What constitutes evidence? When does a report have enough support to justify passing it along? The newspapers and wire services passed on some rumors with sources duly noted—a “buyer beware” technique that never has much to say for it, and still less in a delicate situation like that surrounding Dallas. The television reporters found, Love says (“The Business of Television and the Black Weekend”), that “though rumors can be reported as rumors in a newspaper, to do so on television is much more difficult.” In a sense television journalism grew up in Dallas, for never before had it faced such a story with so much of the responsibility for telling it. As a result of this experience journalists will come to understand better the differences between television and newspaper coverage of news. One thing that became clear, to quote Love again, is that “all the news that's fit to print is not necessarily fit to be seen.” For example, there was the question of whether the amateur movie containing pictures of the President actually being struck by the bullets should be shown on television. Apparently the networks decided against it, although *Life* later published a sequence of still pictures from the same film. Love said the picture would have been used if available on November 22, but later it would have seemed “too horrible” on television.

If the first problem was simply to get reporters where the news was breaking, and the second was to sort out the confused welter of evidence, half-truths, and rumors, a third was to provide enough background, enough news in depth, so that people could understand and evaluate what was happening. Here again Dallas suggested one of the fundamental differences between television and print journalism. Pettit expressed it this way (“The Television Story in Dallas”): “Live television is peculiarly ill-equipped for investigative reporting. It shows only what is there.” Therefore television was at its best in transport-

ing the viewer to the scenes of news—the memorial events in Washington, the return of the new President to the capital, the news conferences, the unforgettable scenes of the dead President's wife and children, and the terrible scenes in the Dallas police headquarters. To fill in between events like these, the networks depended for a while on street interviews until they could prepare documentaries and memorial programs. With the newspapers, however, it was quite different. To see how at least one paper viewed its investigative responsibilities, one has only to read Salisbury's description in this volume. He describes the working approach of the *New York Times* to an event of this type. The newspaper's first responsibility is to provide an "intimate, detailed, accurate chronology of events," an account that would "enable the reader to pick his way fairly well through fact, fiction, and rumor." But the *Times* did not propose to stop with that. It dug into the story with all the men it could assign, and, as a matter of fact, investigated many of the questions later given to the Warren Commission. The list of studies programmed by the *Times* will give many readers a new concept of how some newspapers view their public responsibilities. The *Times* actually found itself going over the same ground as the FBI and the Warren Commission, and kept up its private plowing of this ground until early in 1964.

In Dallas, then, reporters were covering a story that was a mystery from the first minute, and that was doomed to remain in part a mystery forever because of the shooting of the chief suspect. They were operating amidst great confusion and under the shadow of high emotion. Furthermore, they remained competitive on most of the coverage. This situation gave rise to some of the darker hours, as well as some of the most remarkable accomplishments, of news coverage in Dallas.

More than anything else, the newsmen have been criticized for what happened in the Dallas police headquarters. The worst that can be said about the news representatives in this respect is that they *share* responsibilities with Dallas police and officials for the confusion, for the statements in advance of trial about Oswald's guilt, and for the final public showing of Oswald that exposed him to Ruby's gun. Apparently nothing was

done by the Dallas officials to systematize their contacts with newsmen or cameramen. There was no place through which news could be funneled. News conferences were held on the run, and police officers appeared to have no compunction about giving a frank interview whenever asked. Officials said things in these interviews that would surely have been ruled prejudicial if the case had ever come to trial. Some of this conduct on the part of the Dallas officers is explained by a document reprinted in the report of the Warren Commission. This is a general order of the Dallas Police Department that puts on the policemen "a responsibility to lend active assistance" to the press, and forbids an officer to "improperly attempt to interfere with the news media representative. . . . Such activity . . . is regarded by the press as an infringement of rights and the Department shares this view." So far as this goes it is all right, but the directive might well have defined proper "active assistance" and improper "interference." The lack of any well-understood limit of this kind set the stage for the drama of confusion played out on the third floor of the police headquarters, where officers sought to interrogate Oswald, as Oscar MacKenzie says drily in *The New Statesman*, "in the intervals between public appearances."¹⁰

Margaret Mead once wrote of the disastrous consequences that occurred when young people of two cultures were brought together during wartime, those of one culture having learned that it is the girl's responsibility to say no, the others that it is the boy's responsibility.¹¹ Something like that was happening at Dallas. Newsmen were taught to be aggressive and to go as far as they could in covering a story, expecting officials to draw the limits necessary to protect the persons and rights of accused criminals. The Dallas police, one can imagine from the general order, had been taught to be permissive with newsmen and perhaps to expect them to exercise due restraint in criminal cases. Needless to say, there were special reasons on those days

¹⁰ Oscar MacKenzie, "Attention Must Be Paid," *New Statesman* 68 (1964): 475-76.

¹¹ Margaret Mead, "Some Cultural Approaches to Communication Problems," in L. Bryson, ed., *The Communication of Ideas* (New York, 1948).

for newsmen to be especially aggressive and for Dallas officials to be especially permissive. But the cultural misunderstanding that occurred demonstrated the need for a clearer understanding of limits and responsibilities in this area, perhaps not a written code of conduct but at least a set of agreed-upon principles. As Rivers says in his paper in this volume, what happened in the Dallas police headquarters calls for serious discussion of the "area of uncertainty" about what are a reporter's rights, privileges, and duties in covering a criminal case, and especially a very important criminal case like this one. The Kennedy story was not the first one to bring these problems to light, but it throws a pitiless glare on them.¹²

How Was the News Circulated?

There are some remarkable figures in the Nielsen report on television viewing for November 22-25.¹³ During these days the average home in the Nielsen sample had a television receiver tuned to the Kennedy report for a total of 31.6 hours. During that time, Nielsen estimates, approximately 166 million Americans in over 51 million homes were tuned at some time to the Kennedy program, and in one-sixth of those homes people had their television on the big story for more than 11 hours per day! These figures are supported by the NORC survey, for which people estimated that they spent, on the average, 8 hours Friday, 10 Saturday, 8 Sunday, and 8 Monday watching television or listening to the radio.¹⁴

Undoubtedly no event like this, where so many Americans have concentrated vision and hearing on the same story at the same time for so long a period, has ever occurred before. It is

¹² Public reaction was in general quite favorable to the coverage of the story, particularly to its speed and ampleness, and to the three-and-a-half days of television. The chief criticism was professional rather than general, and referred to the sort of things I have been talking about. Some idea of the public criticism can be gained from the reports in this volume by Mindak and Hursh and by Anderson and Moran.

¹³ A. C. Nielsen Co., *TV Responses to the Death of the President* (New York, 1963).

¹⁴ However, Nielsen found Monday—the day of the funeral—the day of heaviest television viewing.

difficult from existing records to estimate the amount of listening to and viewing of the Roosevelt story, but at that time radio and newspapers carried the burden of news diffusion and there was no such concentration on one story as there was in November of 1963.¹⁵ A very rough estimate suggests that for an average family the television viewing of the Kennedy story was greater than the radio listening to the Roosevelt story by a factor of perhaps five to eight times.

One result of the enormous flow of information on the events in Dallas, and the extraordinary public attention to this information, was that there was apparently in this case no hard core of know-nothings. It is a rule of thumb in survey research that 10 to 20 percent of a national sample will probably be unaware of almost any news event. But 99.8 percent of the NORC national sample reported having heard the news by 6 P.M. on Friday—five-and-a-half hours after the President was shot. Furthermore, the news traveled with almost unbelievable swiftness. Two-thirds of the people seem to have heard it within half an hour, even before the President's death was announced. Table 1 gives comparable figures for four of the studies made at the time.

There are no entirely comparable figures from earlier events in this class. A sample of students attending one college at the time of Roosevelt's death showed that 83 percent of them heard the news within 30 minutes and 93 percent within an hour, but these young people were living in close contact in dormitories.¹⁶ Eleven hours elapsed before 90 percent of a university faculty community heard of the death of Senator Taft, and fourteen hours before 90 percent of the eventual knowers in a housing project heard it.¹⁷ Samples of the general public on

¹⁵ A telegraphic poll taken after Roosevelt's funeral indicated that about 88 percent of American adults had listened to the radio at *some* time during the three days following the President's death. This NORC poll is cited by Sheatsley and Feldman.

¹⁶ D. C. Miller. "A Research Note on Mass Communications." *American Sociological Review* 10 (1945): 691-94.

¹⁷ O. M. Larsen and R. J. Hill. "Mass Media and Interpersonal Communication in the Diffusion of a News Event." *American Sociological Review* 19 (1954): 426-33.

TABLE 1.

Sample ^a	Proportion of people who heard news within			
	15 min.	30 min.	45 min.	60 min.
National		68%		
Dallas	67%	84	89%	93%
San Jose, Calif.	42	62	81	90
Iowa City, Iowa		70		91

^a The national sample is reported on in this volume by Sheatsley and Feldman; the San Jose sample by Greenberg; and the Iowa City sample by Spitzer and Spitzer. The report on diffusion in Dallas is in R. J. Hill and C. M. Bonjean, "News Diffusion: A Test of the Regularity Hypothesis," *Journalism Quarterly* 41 (1964): 336-42.

previous occasions have usually returned much lower figures than those obtained in 1963, although it must be noted that these earlier stories have not had the news value of the Kennedy story. For example, 26 percent of the persons in two samples in different parts of the country reported that they had heard of Eisenhower's stroke within an hour of the time the news became available, 43 percent knew of the first Explorer satellite within an hour, and only 6 percent had heard of the voting of statehood for Alaska within an hour.¹⁸

How was the news heard? The studies are in general agreement: a little less than half heard by television or radio; a little over half heard from another person, either face to face or by telephone. Table 2 gives comparative figures from the same four studies just reported upon. Here again we have no strictly comparable figures from the past. The telegraphic survey at the time of Roosevelt's death indicated that 47 percent of people had learned the news from radio or the press, 53 percent from interpersonal sources. Of the college students in dormitories studied by Miller, 88 percent reported they had heard the news from another student.

¹⁸ P. Deutschmann and W. Danielson, "Diffusion of Knowledge of the Major News Story," *Journalism Quarterly* 37 (1960): 345-55.

TABLE 2.

Sample	First source of news			
	TV	Radio	Personal	Newspaper
National	47% (TV + radio)		49%	4%
Dallas	26	17%	57	
San Jose	20	28	50	
Iowa City	19	25	55	

Table 3 gives figures for lesser stories. These figures suggest a pattern as to how fast and by what means a news story reaches the public. The two chief variables would seem to be news value and the time of day when the story breaks. Greenberg was able to show that when a story has narrow interest so that it receives little or no mass media treatment, it is likely that more people who hear about it will hear from other persons.¹⁹ When news value is perceived to be sufficient that the mass media generally carry the story, then, other things being equal,

TABLE 3.

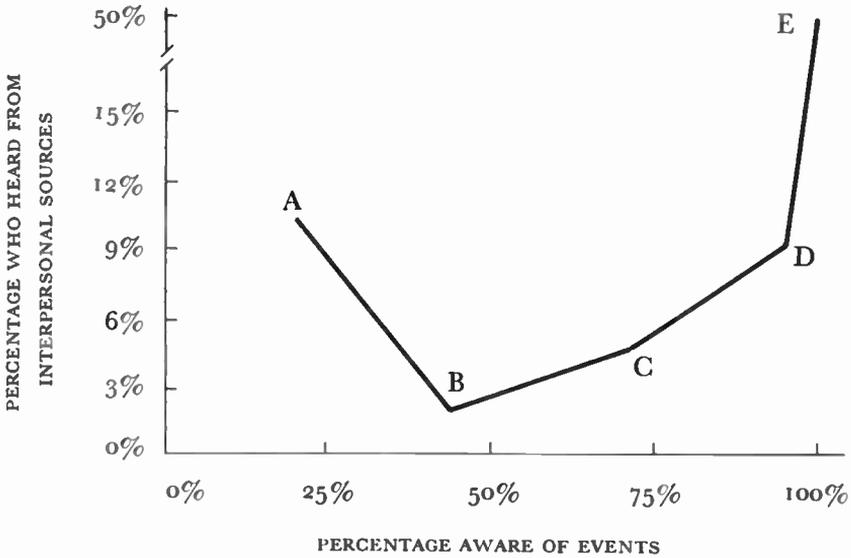
Event ^a	First source of news			
	TV	Radio	Newspaper	Personal
Launching of Explorer I, 1958	41%	23%	18%	18%
Eisenhower's stroke, 1957	38	32	12	18
Alaska statehood, 1958	29	27	38	6
Eisenhower decides to seek second term, 1956	14	39	27	20
Taft's death, 1953	15	49	11	26

^a The source for the first three of these events is Deutschmann and Danielson. The source for the fourth is W. Danielson, "Eisenhower's February Decision: A Study of News Impact," *Journalism Quarterly* 33 (1956): 433-41. The source for the fifth is Larsen and Hill.

¹⁹ Bradley S. Greenberg, "Person-to-Person Communication in the Diffusion of News Events," *Journalism Quarterly* 41 (1964): 489-94.

the greater the news value, the more the story is passed on by word of mouth and therefore the higher the proportion of persons who hear it from interpersonal sources. Thus, if the neighbor's child has measles, that news is likely to be heard, if at all, by word of mouth. If Alaska is voted statehood, that news may be passed around a great deal by word of mouth in Alaska but will be heard mostly by mass media in the rest of the country. Stories like the death of Taft, the launching of the first American satellite, President Eisenhower's stroke, and his decision to seek a second term are of generally higher news value and therefore more likely to be passed on by word of mouth. We find that about three times as many people heard about these stories from interpersonal sources as heard from such sources about the vote on Alaska, but still about four out of five persons heard these news stories first from the mass media. But when we have a story of the highest news value, like the assassination of a president, we find that as many as half the population hear the news from other persons rather than the media. Thus Greenberg found a J-curve when he plotted the proportion of people aware of various news events against the proportion who heard of them from interpersonal sources.

But the time of day makes some difference, too. If an important story breaks during hours when many people are at work, then radio and interpersonal channels will handle most of the diffusion for them. If it breaks in the evening, then television will carry more of the diffusion for them. The Kennedy story broke just after noon for the eastern half of the country, just before noon for the western. Exactly half of the NORC sample reported they had heard the news at home, 29 percent had heard at work, and 21 percent had heard while shopping, having lunch, or doing something else neither at home nor at work. For the people at home, television and telephone calls were important; for the people at work, radio and interpersonal messages; for the others, a variety of media and interpersonal channels. But both the paramount interest of the news and the fact that it broke at midday contributed to an enormous amount of passing it on and talking about it. Members of the Iowa City sample reported having told the news on the av-



erage to between five and six people each. The later news of Oswald's slaying was passed on to an average of three persons. This does not mean, of course, that each of these messages went to someone who had not heard the news; in many cases the conversation must have started, "Have you heard . . . ?" Thirty-seven percent of the national sample reported that they phoned or visited someone else after they heard the news and, coincidentally, 38 percent reported that someone visited them. Banta reports that 35 percent of his Denver sample heard the news from a casual acquaintance, 11 percent from a complete stranger! ²⁰ Clearly the Kennedy story generated an enormous and uncommon amount of interpersonal news-carrying.

But when the news had once been heard, interpersonally or otherwise, then there was a rush to radio or television. Five out of six who could drop what they were doing turned to one of the broadcast media for confirmation or further details.

Thus we can say that the mass media in the crisis following

²⁰ T. J. Banta, "The Kennedy Assassination: Early Thoughts and Emotions," *Public Opinion Quarterly* 28 (1964): 216-24.

the Kennedy assassination delivered the news with almost unparalleled speed and thoroughness, and stimulated interpersonal channels to carry it further. We can also note that the media filled an important role in providing confirmation, further details, and doubtless sometimes correction; apparently the public trusted what it heard on broadcasts or read in the newspapers. But the media must have been filling more functions than these; otherwise, how should we explain the enormous allocation of time to television in the four days of the crisis? To understand better what use was being made of communication in those long hours of viewing between Friday noon and Monday night, let us look more closely at the general reaction of the public to the events.

The Public Reaction and the Function of Communication

Beyond passing the news on, and rushing to TV or radio, how did people react? Obviously there was a very deep, a very widespread emotional response. Less than half the people in the national sample could continue their usual activities. Some felt the need to be with persons they knew or loved; they hurried home or telephoned or visited friends or relatives. Others wanted to be by themselves; the more they admired the President, the more they felt this need.²¹ Television, under differing circumstances, might meet either of these needs; it could be either a solitary or a group activity.

Miller and Zimmerman ("Immediate and Subsequent Reactions in Manhattan") describe the strange atmosphere in New York City on the afternoon of the slaying. It was a sort of "frantic quiet." The usual tumult and noise of New York were missing. Fewer people than usual were hurrying somewhere. There was an uncommon willingness to stop and talk. People gathered around newsstands or radios, surrounded people with portable transistor sets. There was no hesitation about discussing one's feelings with anyone who wished to talk.

²¹ According to Sheatsley and Feldman, 51 percent of Negroes said that they had wanted to be by themselves, but only 28 percent of southern whites so reported.

The most general pattern of personal response was at first shock and disbelief. Some merely sought to check the news; some wilfully denied it. As Orlansky reported newsdealers saying of their customers after Roosevelt's death, "They don't wanna believe it," so Greenstein ("College Students' Reactions") reported respondents saying after Kennedy's, "It can't happen here!"²²

That first shocked response was succeeded by a developing awareness of the loss, along with feelings of sorrow, sadness, shame, and anger. These feelings rolled over the nation in an immense tide. The most common reactions were to be sorry for Mrs. Kennedy and the children, sorry that a vital young man should be killed at the height of his powers, ashamed that such a thing could happen in our country, sad at the loss of someone well-known and dear, and angry that someone could have done such a deed. These responses were very generally reported. Less often reported, but still mentioned by nearly half the national sample, was worry over how the President's death would affect the political situation. For some Americans these feelings were followed by physical symptoms such as weeping, tenseness, sleeplessness, fatigue, or loss of appetite. This was the second stage.

There followed a gradual recovery and return to a normal emotional state. Mindak and Hursh ("Television's Functions on the Assassination Weekend") report that their sample in Minneapolis was "normal" again by Monday. Both the national sample and the Dallas sample reported that the majority of physical symptoms had departed after four days.²³ By that time also, anger and anxiety were less, the worst of the grief was over, and there were indications of rededication on the part of some people. Hurn and Messer ("Grief and Rededication") report that about a third of their Chicago sample felt they should personally rededicate themselves by becoming more tolerant, and Sears ("Effects of the Assassination on Political Partisan-

²² Orlansky, "Reactions to the Death of President Roosevelt," pp. 240ff.

²³ Sheatsley and Feldman, "A National Survey of Public Reactions and Behavior," p. 160; Bonjean, Hill, and Martin, "Reactions to the Assassination in Dallas," p. 185.

ship") demonstrated that people became less partisan immediately after the events in Dallas. In general, there was a social reintegration covering over the scars of the sad weekend. That was the third stage.

Several things can be pointed out about this personal and public response. For one thing it was primarily grief rather than anxiety. The physical symptoms we have listed are typical of grief and bereavement. Anxiety has a different set of symptoms.²⁴ Bradburn and Feldman ("Public Apathy and Public Grief") were able to document this by comparing two groups of respondents, who were interviewed in October and again after the assassination. One of these was a Negro sample in Detroit, the other a mostly white sample in a suburb of Washington. Between the first interview and the second, grief symptoms rose markedly in both samples, but anxiety symptoms rose only in the Negro sample, where people must have felt more personally threatened by events. And the pattern of reaction in general was typical of mourning—shock and intense sorrow, which was poured out or worked out, permitting the individual to return after a fairly short time to normal patterns of behavior, often with a sense of rededication or moral obligation.

Another observation during those days was the relative scarcity of political anxiety and reactions built around fear of a political conspiracy. Concern over who the assassin was and whether he would be apprehended was evident from the first, and about four out of five named an immediate suspect. About one out of four at once suspected a Communist, a Castroite, or a leftist of some other kind; about half that many thought of a segregationist or another right-wing person. But as time passed these suspicions became markedly less; and in particular there was relatively little anxiety lest a foreign group or a conspiring political group be active in the situation (see Miller and Zimmerman, Coleman and Hollander ["Changes in Belief in the Weeks Following the Assassination"]). If Americans had been fearful about the succession of a new President, most of them soon lost these fears. If many of them had first rejected the idea that "one man could do what Oswald did," most of them appar-

²⁴ Engel, "Is Grief a Disease?" pp. 18ff.

ently became sufficiently satisfied with the explanation so that the alternatives did not worry or arouse them.

In the third place, it is worth noting, as do Verba ("The Kennedy Assassination and the Nature of Political Commitment") and Hurn and Messer, that this crisis was integrative rather than disintegrative for the United States. Unlike most of the world's crises in which a change of chief executive is occasioned by violence, the events of November 22-25 brought Americans together rather than driving them apart. They closed ranks around the new President. Partisanship on a national political level was abandoned during a month of mourning, and, as Sears was able to show, partisanship was reduced on a private and personal level also. If the reaction of the Chicago sample was typical, many Americans were thinking in December, 1963, about their obligation to practice brotherhood, tolerance, and other integrative behavior.

Now why should responses to President Kennedy's assassination and related events have taken these forms? Why should they have been so largely grief rather than anxiety, so relatively lacking in fear of a political conspiracy, and so largely integrative rather than divisive? Why should it have been Europe rather than the United States that kept alive, during the subsequent year, the suspicions of threatening conspiracy? Why was the period of recovery so relatively short, although the grief was manifestly so deep?

There are no simple answers to questions like these. One answer lies in the American people's faith in their national institutions, including the succession to the presidency and the rule of law. Another is the firm and responsible actions of the new Chief Executive and his government. One out of many others is, as Coleman and Hollander say, that the events following the assassination remind us of "the different courses public opinion can take and of our meager knowledge of the dynamics."

But an important part of the answer to such questions must lie in the performance and use of mass communication during the four days. It was extremely important to a shocked public to have such a large and continuing flow of information on the matter that concerned them. Incomplete and grudging infor-

mation at a time of crisis breeds suspicion and rumor. Able press representatives have always known this. Thus when President Eisenhower had his heart attack, James Hagerty had the President's doctor explain the illness and the prognosis to newsmen and to the television audience; as a result fears and doubts were allayed, people took the illness in stride, and ground was laid for public confidence in the President's ability to carry on his duties and ultimately to serve a second term. The flow of news from Dallas also did something like this. As much as we may regret some of the things that happened in the Dallas police headquarters, still if it were not for the aggressive news coverage by the media and the frankness of officials we should probably have had greater anxiety and a slower integration.

The swift, full coverage undoubtedly grounded many rumors before they could circulate. By speaking so fully and frankly of Oswald and the events in which he was involved, the media helped to reduce fears of a conspiracy and prepare people to believe the theory that a lone, disturbed man had done it. Demonstrating that the presidential succession was working smoothly, that the government was going forward in firm hands, helped reduce fears and recriminations. For a student of communication, one of the most important deductions from the events of late November, 1963, is that Americans trust their free press and their free broadcasting system. In this case it must be said that these did not fail the American people in any important way. The people got the full news, they got it fast, and they got it, with a very few exceptions, accurately.

The function of the news coverage of the Kennedy crisis is thus fairly clear. We understand less well what was happening during those long hours when so many tens of millions watched the television set. Many people have remarked about the compulsive quality of this viewing. Greenstein documents some of it in his transcriptions of discussion groups:

Subject₁. I don't know why we sit here and watch it.

S₂. I stayed right up until the network went off.

S₃. I don't know. It's just something like this creates . . . kind

of like a vacuum in your head of all the things you're used to and you just have to fill it up.

- S₄. I kept waiting for something that would make me feel more hopeful or feel better about it. It never came, of course, but you're tied to the TV set in hopes that it would.
- S₅. After the TV went off last night, I thought about . . . why I had spent the whole day and it struck me that I was waiting for somebody to explain why this happened.

These viewers didn't know why they had viewed so long but realized they were doing it to fill a gap, looking for explanation, reassurance, perhaps for something they could not readily articulate. The explanation they were seeking must have been more than a surface one. They were probably seeking, whether they knew it or not, a kind of philosophical explanation for the irony of the loss of a young, admired, and beloved leader, a reconciliation of this event with their ideals of justice and fairness, and an opportunity to get rid of their weight of grief. And as we have said before, they were probably watching because they did not know just what else under the circumstances to do.

This is speculation, of course. Certain things we can say in a less speculative vein about the long listening to television. We can note what was coming to them through the picture tube. In addition to the flow of spot news, they were watching and hearing national leaders, being reminded of national history and the rituals and laws of the national government, reviewing the career of the dead President, seeing the norms and mores of American life exemplified for them by people they admired. In other words they were being *reassured* that the nation, and in particular the presidency, was continuing as they wanted it to, and they were being reminded of a *pattern of conduct* expected of them as Americans.

In the second place they were being shown symbols and events—the flag-draped casket, the young widow and the children, the terrible slow drumbeat of the funeral march—that gave them an opportunity to experience a real catharsis of grief if they wanted to. Aristotle used the word catharsis to describe the aesthetic effect of Greek drama in purging impure and ex-

cessive emotions. It has become a bit old-fashioned to talk about catharsis in this sense, and yet this is what introspection tells us must have been happening before many of those television sets. The viewers were purging themselves of their burden of grief and anger by going through acts of mourning, much as they might have done for a family bereavement. They were weeping, secretly or openly, over the sights of the national tragedy. They were participating as much as they could in memorial events. They were going to a funeral.

And they were doing these things *together!* The enormous, the unequaled focus of attention that occurred around the television sets of America during the crisis, and especially on the day of the funeral, when audience measurements in New York found more than 90 percent of sets tuned at one time to the funeral procession—this concentration of attention deserves more thought than it has been given. How many of the viewers actually felt that they were sitting in a congregation of 150 million Americans, we do not know. Many of them apparently had a sense of participating in a national act. This focus of attention, as Coleman and Hollander have pointed out, contained the potential for great national action. If a suitable object for great national anger had emerged from the news of the crisis, it is conceivable that a mass uprising might have occurred. But the very fullness of the news won confidence in it, and developments cut the ground out from under any belief that a nationally dangerous conspiracy was involved. Instead, the focus on the presidency reasserted America's deep commitment to that institution and to the rule of law and order.

The experiences of 150 million Americans before their television sets during the dark weekend, then, were a sharing of common information, a reassertion of national norms, and a national act of mourning which must have been for many viewers a catharsis of grief. When the experience is seen in this way, it is somewhat easier to understand why the experience was so largely grief rather than anxiety, why Americans closed the book on an anxiety over conspiracy more quickly than Europeans did, and why the recovery after the weekend of grief came so comparatively soon, with elements of rededication and rein-

tegration rather than divisiveness and disquiet. To sum up, it appears that the essential elements in this response were the enormous flow of news and the enormous focus of attention on television sets that at times could have been described as a truly national act involving most of a major nation's citizens.

There has been a great deal of theorizing about the difference between the conditions under which the mass media have a significant effect directly on the public, and the conditions under which their effect has to be mediated by opinion leaders or other interpersonal carriers. Undoubtedly the interpersonal channels of information and influence were working from November 22 through November 25 as at other times, and we have already noted that the news of the two murders was passed along from person to person with phenomenal speed. But the general rush to radio or television as soon as the news was heard, and the enormous concentration on the mass media, especially television, during the next three days, lead us to think that a two-step flow was not the major factor in the effects we have been describing. Many Americans, of course, watched television in family groups during those days, but the significant fact is that such large numbers were watching: they were not told secondhand; they came themselves with their sadness, their questioning, to witness the dramatic events on the picture tube. Television during those four days was a communication event somewhat like the Kennedy-Nixon debates, in that both events brought very large numbers of people into direct contact with the developments and persons to which they expected to react. And like the changes in estimation of the candidates and voting intention that took place after the first debate, so the individual catharsis, the laying of doubts to rest, and the reinforcement of American norms that took place in audiences after the President's assassination appear to be examples of the powerful direct effects of which the mass media, under favorable conditions, are capable.

PAUL F. LAZARSFELD
AND ROBERT K. MERTON

*Mass Communication, Popular Taste,
and Organized Social Action*

This is perhaps the most sophisticated statement of the point of view that the chief social effect of the mass media is no change—to enforce the status quo and keep change from happening. This famous paper is full of ideas and concepts that have been discussed ever since it was published—the “status-conferral” power of the media, their “narcotizing dysfunction” (the ability to inform their audiences and absorb their time, without energizing them), their ability to “canalize” behavior (if a person is already convinced about the usefulness of a toothbrush, it is not difficult to direct him to one toothbrush rather than another), and so forth. It will repay thoughtful reading. But the central thesis is that the mass communication system, integrated as it is into the business establishment, has its chief social effect in enforcing existing norms and values. Mass propaganda can be effective, they say, only when it has monopoly control, when it is supplemented in an important way by personal communication, or when it is satisfied with “canalizing” some already existing viewpoints or behaviors. Drs. Lazarsfeld and Merton are professors of sociology at Columbia University, and Dr. Lazarsfeld was for many years director of the Bureau of Applied Social Research. This paper was published in *The Communication of Ideas*, edited by Lyman Bryson, copyright 1948 by the Institute for Religious and Social Studies, New York. It is reprinted by permission of the authors and the holder of the copyright.

PROBLEMS ENGAGING the attention of men change, and they change not at random but largely in accord with the altering demands of society and economy. If a group such as those who have written the chapters of this book had been brought together a generation or so ago, the subject for discussion would in all probability have been altogether different. Child labor, woman suffrage, or old-age pensions might have occupied the attention of a group such as this, but certainly not problems of the media of mass communication. As a host of recent confer-

ences, books, and articles indicate, the role of radio, print, and film in society has become a problem of interest to many and a source of concern to some. This shift in public interest appears to be the product of several social trends.

Social Concern with the Mass Media

Many are alarmed by the ubiquity and potential power of the mass media. A participant in this symposium has written, for example, that "the power of radio can be compared only with the power of the atomic bomb." It is widely felt that the mass media comprise a powerful instrument which may be used for good or for ill and that, in the absence of adequate controls, the latter possibility is on the whole more likely. For these are the media of propaganda and Americans stand in peculiar dread of the power of propaganda. As the British observer, William Empson, remarked of us: "They believe in machinery more passionately than we do; and modern propaganda is a scientific machine; so it seems to them obvious that a mere reasoning man can't stand up against it. All this produces a curiously girlish attitude toward anyone who might be doing propaganda. 'Don't let that man come near. Don't let him tempt me, because if he does, I'm sure to fall.'"

The ubiquity of the mass media promptly leads many to an almost magical belief in their enormous power. But there is another (and probably a more realistic) basis for widespread concern with the social role of the mass media; a basis which has to do with the changing types of social control exercised by powerful interest groups in society. Increasingly, the chief power groups, among which organized business occupies the most spectacular place, have come to adopt techniques for manipulating mass publics through propaganda in place of more direct means of control. Industrial organizations no longer compel eight-year-old children to attend the machine for fourteen hours a day; they engage in elaborate programs of "public relations." They place large and impressive advertisements in the newspapers of the nation; they sponsor numerous radio programs; on the advice of public relations counsellors they orga-

nize prize contests, establish welfare foundations, and support worthy causes. Economic power seems to have reduced direct exploitation and turned to a subtler type of psychological exploitation, achieved largely by disseminating propaganda through the mass media of communication.

This change in the structure of social control merits thorough examination. Complex societies are subject to many different forms of organized control. Hitler, for example, seized upon the most visible and direct of these: organized violence and mass coercion. In this country, direct coercion has become minimized. If people do not adopt the beliefs and attitudes advocated by some power group—say, the National Association of Manufacturers—they can neither be liquidated nor placed in concentration camps. Those who would control the opinions and beliefs of our society resort less to physical force and more to mass persuasion. The radio program and the institutional advertisement serve in place of intimidation and coercion. The manifest concern over the functions of the mass media is in part based upon the valid observation that these media have taken on the job of rendering mass publics conformative to the social and economic status quo.

A third source of widespread concern with the social role of mass media is found in their assumed effects upon popular culture and the aesthetic tastes of their audiences. In the measure that the size of these audiences has increased, it is argued, the level of aesthetic taste has deteriorated. And it is feared that the mass media deliberately cater to these vulgarized tastes, thus contributing to further deterioration.

It seems probable that these constitute the three organically related elements of our great concern with the mass media of communication. Many are, first of all, fearful of the ubiquity and potential power of these media. We have suggested that this is something of an indiscriminate fear of an abstract bogey stemming from insecurity of social position and tenuously held values. Propaganda seems threatening.

There is, second, concern with the present effects of the mass media upon their enormous audiences, particularly the possi-

bility that the continuing assault of these media may lead to the unconditional surrender of critical faculties and an unthinking conformism.

Finally, there is the danger that these technically advanced instruments of mass communication constitute a major avenue for the deterioration of aesthetic tastes and popular cultural standards. And we have suggested that there is substantial ground for concern over these immediate social effects of the mass media of communication.

A review of the current state of actual knowledge concerning the social role of the mass media of communication and their effects upon the contemporary American community is an ungrateful task, for certified knowledge of this kind is impressively slight. Little more can be done than to explore the nature of the problems by methods which, in the course of many decades, will ultimately provide the knowledge we seek. Although this is anything but an encouraging preamble, it provides a necessary context for assessing the research and tentative conclusions of those of us professionally concerned with the study of mass media. A reconnaissance will suggest what we know, what we need to know, and will locate the strategic points requiring further inquiry.

To search out "the effects" of mass media upon society is to set upon an ill-defined problem. It is helpful to distinguish three facets of the problem and to consider each in turn. Let us, then, first inquire into what we know about the effects of the existence of these media in our society. Second, we must look into the effects of the particular structure of ownership and operation of the mass media in this country, a structure which differs appreciably from that found elsewhere. And, finally, we must consider that aspect of the problem which bears most directly upon policies and tactics governing the use of these media for definite social ends: our knowledge concerning the effects of the particular contents disseminated through the mass media.

The Social Role of the Machinery of Mass Media

What role can be assigned to the mass media by virtue of the fact that they exist? What are the implications of a Hollywood, a Radio City, and a *Time-Life-Fortune* enterprise for our society? These questions can of course be discussed only in grossly speculative terms, since no experimentation or rigorous comparative study is possible. Comparisons with other societies lacking these mass media would be too crude to yield decisive results, and comparisons with an earlier day in American society would still involve gross assertions rather than precise demonstrations. In such an instance, brevity is clearly indicated. And opinions should be leavened with caution. It is our tentative judgment that the social role played by the very existence of the mass media has been commonly overestimated. What are the grounds for this judgment?

It is clear that the mass media reach enormous audiences. Approximately forty-five million Americans attend the movies every week; our daily newspaper circulation is about fifty-four million, and some forty-six million American homes are equipped with television, and in these homes the average American watches television for about three hours a day. These are formidable figures. But they are merely supply and consumption figures, not figures registering the effect of mass media. They bear only upon what people do, not upon the social and psychological impact of the media. To know the number of hours people keep the radio turned on gives no indication of the effect upon them of what they hear. Knowledge of consumption data in the field of mass media remains far from a demonstration of their net effect upon behavior and attitude and outlook.

As was indicated a moment ago, we cannot resort to experiment by comparing contemporary American society with and without mass media. But, however tentatively, we can compare their social effect with, say, that of the automobile. It is not unlikely that the invention of the automobile and its development into a mass-owned commodity has had a significantly

greater effect upon society than the invention of the radio and its development into a medium of mass communication. Consider the social complexes into which the automobile has entered. Its sheer existence has exerted pressure for vastly improved roads, and, with these, mobility has increased enormously. The shape of metropolitan agglomerations has been significantly affected by the automobile. And, it may be submitted, the inventions which enlarge the radius of movement and action exert a greater influence upon social outlook and daily routines than inventions which provide avenues for ideas—ideas which can be avoided by withdrawal, deflected by resistance, and transformed by assimilation.

Granted, for a moment, that the mass media play a comparatively minor role in shaping our society, why are they the object of so much popular concern and criticism? Why do so many become exercised by the "problems" of the radio and film and press and so few by the problems of, say, the automobile and the airplane? In addition to the sources of this concern which we have noted previously, there is an unwitting psychological basis for concern which derives from a socio-historical context.

Many make the mass media targets for hostile criticism because they feel themselves duped by the turn of events.

The social changes ascribable to "reform movements" may be slow and slight, but they do cumulate. The surface facts are familiar enough. The sixty-hour week has given way to the forty-hour week. Child labor has been progressively curtailed. With all its deficiencies, free universal education has become progressively institutionalized. These and other gains register a series of reform victories. And now, people have more leisure time. They have, ostensibly, greater access to the cultural heritage. And what use do they make of this unmortgaged time so painfully acquired for them? They listen to the radio and go to the movies. These mass media seem somehow to have cheated reformers of the fruits of their victories. The struggle for freedom for leisure and popular education and social security was carried on in the hope that, once freed of cramping shackles, people would avail themselves of major cultural products of

our society, Shakespeare or Beethoven or perhaps Kant. Instead, they turn to Faith Baldwin or Johnny Mercer or Edgar Guest.

Many feel cheated of their prize. It is not unlike a young man's first experience in the difficult realm of puppy love. Deeply smitten with the charms of his lady love, he saves his allowance for weeks on end and finally manages to give her a beautiful bracelet. She finds it "simply divine." So much so, that then and there she makes a date with another boy in order to display her new trinket. Our social struggles have met with a similar denouement. For generations men fought to give people more leisure time, and now they spend it with the Columbia Broadcasting System rather than with Columbia University.

However little this sense of betrayal may account for prevailing attitudes toward the mass media, it may again be noted that the sheer presence of these media may not affect our society so profoundly as it is widely supposed.

Some Social Functions of the Mass Media

In continuing our examination of the social role which can be ascribed to the mass media by virtue of their "sheer existence," we temporarily abstract from the social structure in which the media find their place. We do not, for example, consider the diverse effects of the mass media under varying systems of ownership and control, an important structural factor which will be discussed subsequently.

The mass media undoubtedly serve many social functions which might well become the object of sustained research. Of these functions, we have occasion to notice only three.

THE STATUS-CONFERRAL FUNCTION

The mass media *confer* status on public issues, persons, organizations, and social movements.

Common experience as well as research testifies that the social standing of persons or social policies is raised when these command favorable attention in the mass media. In many quar-

ters, for example, the support of a political candidate or a public policy by the *Times* is taken as significant, and this support is regarded as a distinct asset for the candidate or the policy. Why?

For some, the editorial views of the *Times* represent the considered judgment of a group of experts, thus calling for the respect of laymen. But this is only one element in the status-conferral function of the mass media, for enhanced status accrues to those who merely receive attention in the media, quite apart from any editorial support.

The mass media bestow prestige and enhance the authority of individuals and groups by *legitimizing their status*. Recognition by the press or radio or magazines or newsreels testifies that one has arrived, that one is important enough to have been singled out from the large anonymous masses, that one's behavior and opinions are significant enough to require public notice. The operation of this status-conferral function may be witnessed most vividly in the advertising pattern of testimonials to a product by "prominent people." Within wide circles of the population (though not within certain selected social strata), such testimonials not only enhance the prestige of the product but also reflect prestige on the person who provides the testimonials. They give public notice that the large and powerful world of commerce regards him as possessing sufficiently high status for his opinion to count with many people. In a word, his testimonial is a testimonial to his own status.

The ideal, if homely, embodiment of this circular prestige pattern is to be found in the Lord Calvert series of advertisements centered on "Men of Distinction." The commercial firm and the commercialized witness to the merit of the product engage in an unending series of reciprocal pats on the back. In effect, a distinguished man congratulates a distinguished whisky which, through the manufacturer, congratulates the man of distinction on his being so distinguished as to be sought out for a testimonial to the distinction of the product. The workings of this mutual admiration society may be as nonlogical as they are effective. The audiences of mass media apparently subscribe to the circular belief: "If you really matter, you will be at the

focus of mass attention and, if you *are* at the focus of mass attention, then surely you must really matter."

This status-conferral function thus enters into organized social action by legitimizing selected policies, persons, and groups which receive the support of mass media. We shall have occasion to note the detailed operation of this function in connection with the conditions making for the maximal utilization of mass media for designated social ends. At the moment, having considered the "status-conferral" function, we shall consider a second: the enforced application of social norms through the mass media.

THE ENFORCEMENT OF SOCIAL NORMS

Such catch phrases as "the power of the press" (and other mass media) or "the bright glare of publicity" presumably refer to this function. The mass media may initiate organized social action by "exposing" conditions which are at variance with public moralities. But it need not be prematurely assumed that this pattern consists *simply* in making these deviations widely known. We have something to learn in this connection from Malinowski's observations among his beloved Trobriand Islanders. There, he reports, no organized social action is taken with respect to behavior deviant from a social norm unless there is *public* announcement of the deviation. This is not merely a matter of acquainting the individuals in the group with the facts of the case. Many may have known privately of these deviations—e.g., incest among the Trobrianders, as with political or business corruption, prostitution, gambling among ourselves—but they will not have pressed for public action. But once the behavioral deviations are made simultaneously public for all, this sets in train tensions between the "privately tolerable" and the "publicly acknowledgeable."

The mechanism of public exposure would seem to operate somewhat as follows. Many social norms prove inconvenient for individuals in the society. They militate against the gratification of wants and impulses. Since many find the norms burdensome, there is some measure of leniency in applying them, both

to oneself and to others. Hence, the emergence of deviant behavior and private toleration in these deviations. But this can continue only so long as one is not in a situation where one must take a public stand for or against the norms. Publicity, the enforced acknowledgment by members of the group that these deviations have occurred, requires each individual to take such a stand. He must either range himself with the nonconformists, thus proclaiming his repudiation of the group norms, and thus asserting that he, too, is outside the moral framework or, regardless of his private predilections, he must fall into line by supporting the norm. *Publicity closes the gap between "private attitudes" and "public morality."* Publicity exerts pressure for a single rather than a dual morality by preventing continued evasion of the issue. It calls forth public reaffirmation and (however sporadic) application of the social norm.

In a mass society, this function of public exposure is institutionalized in the mass media of communication. Press, radio, and journals expose fairly well-known deviations to public view and, as a rule, this exposure forces some degree of public action against what has been privately tolerated. The mass media may, for example, introduce severe strains upon "polite ethnic discrimination" by calling public attention to these practices which are at odds with the norms of nondiscrimination. At times, the media may organize exposure activities into a "crusade."

The study of crusades by mass media would go far toward answering basic questions about the relation of mass media to organized social action. It is essential to know, for example, the extent to which the crusade provides an organizational center for otherwise unorganized individuals. The crusade may operate diversely among the several sectors of the population. In some instances, its major effect may not be so much to arouse an indifferent citizenry as to alarm the culprits, leading them to extreme measures which in turn alienate the electorate. Publicity may so embarrass the malefactor as to send him into flight as was the case, for example, with some of the chief henchmen of the Tweed Ring following exposure by the *New York Times*. Or the directors of corruption may fear the cru-

sade only because of the effect they anticipate it will have upon the electorate. Thus, with a startling realistic appraisal of the communications behavior of his constituency, Boss Tweed peevishly remarked of the biting cartoons of Thomas Nast in *Harper's Weekly*: "I don't care a straw for your newspaper articles: my constituents don't know how to read, but they can't help seeing them damned pictures."¹

The crusade may affect the public directly. It may focus the attention of a hitherto lethargic citizenry, grown indifferent through familiarity to prevailing corruption, upon a few dramatically simplified issues. As Lawrence Lowell once observed in this general connection, complexities generally inhibit mass action. Public issues must be defined in simple alternatives, in terms of black and white, to permit organized public action. And the presentation of simple alternatives is one of the chief functions of the crusade. The crusade may involve still other mechanisms. If a municipal government is not altogether pure of heart, it is seldom wholly corrupt. Some scrupulous members of the administration and judiciary are generally intermingled with their unprincipled colleagues. The crusade may strengthen the hand of the upright elements in the government, force the hand of the indifferent, and weaken the hand of the corrupt. Finally, it may well be that a successful crusade exemplifies a circular, self-sustaining process, in which the concern of the mass medium with the public interest coincides with its self-interest. The triumphant crusade may enhance the power and prestige of the mass medium, thus making it, in turn, more formidable in later crusades, which, if successful, may further advance its power and prestige.

Whatever the answer to these questions, mass media clearly serve to reaffirm social norms by exposing deviations from these norms to public view. Study of the particular range of norms thus reaffirmed would provide a clear index of the extent to which these media deal with peripheral or central problems of the structure of our society.

¹ James Bryce, *The American Commonwealth*, vol. 2 (New York: Macmillan, 1910, 1914).

THE NARCOTIZING DYSFUNCTION

The functions of status conferral and of reaffirmation of social norms are evidently well recognized by the operators of mass media. Like other social and psychological mechanisms, these functions lend themselves to diverse forms of application. Knowledge of these functions is power, and power may be used for special interests or for the general interest.

A third social consequence of the mass media has gone largely unnoticed. At least, it has received little explicit comment and, apparently, has not been systematically put to use for furthering planned objectives. This may be called the narcotizing dysfunction of the mass media. It is termed *dysfunctional* rather than functional on the assumption that it is not in the interest of modern complex society to have large masses of the population politically apathetic and inert. How does this unplanned mechanism operate?

Scattered studies have shown that an increasing proportion of the time of Americans is devoted to the products of the mass media. With distinct variations in different regions and among different social strata, the outpourings of the media presumably enable the twentieth-century American to "keep abreast of the world." Yet, it is suggested, this vast supply of communications may elicit only a superficial concern with the problems of society, and this superficiality often cloaks mass apathy.

Exposure to this flood of information may serve to narcotize rather than to energize the average reader or listener. As an increasing meed of time is devoted to reading and listening, a decreasing share is available for organized action. The individual reads accounts of issues and problems and may even discuss alternative lines of action. But this rather intellectualized, rather remote connection with organized social action is not activated. The interested and informed citizen can congratulate himself on his lofty state of interest and information and neglect to see that he has abstained from decision and action. In short, he takes his secondary contact with the world of political reality, his reading and listening and thinking, as a vicarious perfor-

mance. He comes to mistake *knowing* about problems of the day for *doing* something about them. His social conscience remains spotlessly clean. He *is* concerned. He *is* informed. And he has all sorts of ideas as to what should be done. But, after he has gotten through his dinner and after he has listened to his favored radio programs and after he has read his second newspaper of the day, it is really time for bed.

In this peculiar respect, mass communications may be included among the most respectable and efficient of social narcotics. They may be so fully effective as to keep the addict from recognizing his own malady.

That the mass media have lifted the level of information of large populations is evident. Yet, quite apart from intent, increasing dosages of mass communications may be inadvertently transforming the energies of men from active participation into passive knowledge.

The occurrence of this narcotizing dysfunction can scarcely be doubted, but the extent to which it operates has yet to be determined. Research on this problem remains one of the many tasks still confronting the student of mass communications.

The Structure of Ownership and Operation

To this point we have considered the mass media quite apart from their incorporation within a particular social and economic structure. But clearly, the social effects of the media will vary as the system of ownership and control varies. Thus to consider the social effects of American mass media is to deal only with the effects of these media as privately owned enterprises under profit-oriented management. It is general knowledge that this circumstance is not inherent in the technological nature of the mass media. In England, for example, to say nothing of Russia, the radio is to all intents and purposes owned, controlled, and operated by government.

The structure of control is altogether different in this country. Its salient characteristic stems from the fact that except for movies and books, it is not the magazine reader nor the radio

listener nor, in large part, the reader of newspapers who supports the enterprise, but the advertiser. Big business finances the production and distribution of mass media. And, all intent aside, he who pays the piper generally calls the tune.

Social Conformism

Since the mass media are supported by great business concerns geared into the current social and economic system, the media contribute to the maintenance of that system. This contribution is not found merely in the effective advertisement of the sponsor's product. It arises, rather, from the typical presence in magazine stories, radio programs, and newspaper columns of some element of confirmation, some element of approval of the present structure of society. And this continuing reaffirmation underscores the duty to accept.

To the extent that the media of mass communication have had an influence upon their audiences, it has stemmed not only from what is said, but more significantly from what is not said. For these media not only continue to affirm the status quo but, in the same measure, they fail to raise essential questions about the structure of society. Hence, by leading toward conformism and by providing little basis for a critical appraisal of society, the commercially sponsored mass media indirectly but effectively restrain the cogent development of a genuinely critical outlook.

This is not to ignore the occasionally critical journal article or radio program. But these exceptions are so few that they are lost in the overwhelming flood of conformist materials. . . .

Since our commercially sponsored mass media promote a largely unthinking allegiance to our social structure, they cannot be relied upon to work for changes, even minor changes, in that structure. It is possible to list some developments to the contrary, but upon close inspection they prove illusory. A community group, such as the PTA, may request the producer of a radio serial to inject the theme of tolerant race attitudes into the program. Should the producer feel that this theme is safe, that it will not antagonize any substantial part of his audience,

he may agree, but at the first indication that it is a dangerous theme which may alienate potential consumers, he will refuse, or will soon abandon the experiment. Social objectives are consistently surrendered by commercialized media when they clash with economic gains. Minor tokens of "progressive" views are of slight importance since they are included only by the grace of the sponsors and only on the condition that they be sufficiently acceptable as not to alienate any appreciable part of the audience. Economic pressure makes for conformism by omission of sensitive issues.

Impact upon Popular Taste

Since the largest part of our radio, movies, magazines, and a considerable part of our books and newspapers are devoted to "entertainment," this clearly requires us to consider the impact of the mass media upon popular taste.

Were we to ask the average American with some pretension to literary or aesthetic cultivation if mass communications have had any effect upon popular taste, he would doubtlessly answer with a resounding affirmative. And more, citing abundant instances, he would insist that aesthetic and intellectual tastes have been depraved by the flow of trivial formula products from printing presses, radio stations, and movie studios. The columns of criticism abound with these complaints.

In one sense, this requires no further discussion. There can be no doubt that the women who are daily entranced for three or four hours by some twelve consecutive "soap operas," all cut to the same dismal pattern, exhibit an appalling lack of aesthetic judgment. Nor is this impression altered by the contents of pulp and slick magazines, or by the depressing abundance of formula motion pictures replete with hero, heroine, and villain moving through a contrived atmosphere of sex, sin, and success.

Yet unless we locate these patterns in historical and sociological terms, we may find ourselves confusedly engaged in condemning without understanding, in criticism which is sound but largely irrelevant. What is the historical status of this notoriously low level of popular taste? Is it the poor remains of

standards which were once significantly higher, a relatively new birth in the world of values, largely unrelated to the higher standards from which it has allegedly fallen, or a poor substitute blocking the way to the development of superior standards and the expression of high aesthetic purpose?

If aesthetic tastes are to be considered in their social setting, we must recognize that the effective audience for the arts has become historically transformed. Some centuries back, this audience was largely confined to a selected aristocratic elite. Relatively few were literate. And very few possessed the means to buy books, attend theaters, and travel to the urban centers of the arts. Not more than a slight fraction, possibly not more than one or two percent, of the population composed the effective audience for the arts. These happy few cultivated their aesthetic tastes, and their selective demand left its mark in the form of relatively high artistic standards.

With the widesweeping spread of popular education and with the emergence of the new technologies of mass communication, there developed an enormously enlarged market for the arts. Some forms of music, drama, and literature now reach virtually everyone in our society. This is why, of course, we speak of *mass media* and of *mass art*. And the great audiences for the mass media, though in the main literate, are not highly cultivated. About half the population, in fact, have halted their formal education upon leaving grammar school.

With the rise of popular education, there has occurred a seeming decline of popular taste. Large numbers of people have acquired what might be termed "formal literacy," that is to say, a capacity to read, to grasp crude and superficial meanings, and a correlative incapacity for full understanding of what they read.² There has developed, in short, a marked gap be-

² *Ibid.*, Part IV, Ch. 80. James Bryce perceived this with characteristic clarity: "That the education of the masses is nevertheless a superficial education goes without saying. It is sufficient to enable them to think they know something about the great problems of politics: insufficient to show them how little they know. The public elementary school gives everybody the key to knowledge in making reading and writing familiar, but it has not time to teach him how to use the key, whose use is in fact, by the pressure of daily work, almost confined to the newspaper and the magazine. So we may say that if the political educa-

tween literacy and comprehension. People read more but understand less. More people read but proportionately fewer critically assimilate what they read.

Our formulation of the problem should now be plain. It is misleading to speak simply of the decline of aesthetic tastes. Mass audiences probably include a larger number of persons with cultivated aesthetic standards, but these are swallowed up by the large masses who constitute the new and untutored audience for the arts. Whereas yesterday the elite constituted virtually the whole of the audience, they are today a minute fraction of the whole. In consequence, the average level of aesthetic standards and tastes of audiences has been depressed, although the tastes of some sectors of the population have undoubtedly been raised and the total number of people exposed to communication contents has been vastly increased.

But this analysis does not directly answer the question of the effects of the mass media upon public taste, a question which is as complex as it is unexplored. The answer can come only from disciplined research. One would want to know, for example, whether mass media have robbed the intellectual and artistic elite of the art forms which might otherwise have been accessible to them. And this involves inquiry into the pressure exerted by the mass audience upon creative individuals to cater to mass tastes. Literary hacks have existed in every age. But it would be important to learn if the electrification of the arts supplies power for a significantly greater proportion of dim literary lights. And, above all, it would be essential to determine if mass media and mass tastes are necessarily linked in a vicious circle of deteriorating standards or if appropriate action on the part of the directors of mass media could initiate a virtuous circle of cumulatively improving tastes among their audiences. More concretely, are the operators of commercialized mass

tion of the average American voter be compared with that of the average voter in Europe, it stands high; but if it be compared with the functions which the theory of the American government lays on him, which its spirit implies, which the methods of its party organization assume, its inadequacy is manifest." *Mutatis mutandis*, the same may be said of the gap between the theory of "superior" cultural content in the mass media and the current levels of popular education.

media caught up in a situation in which they cannot, whatever their private preferences, radically raise the aesthetic standards of their products?

In passing, it should be noted that much remains to be learned concerning standards appropriate for mass art. It is possible that standards for art forms produced by a small band of creative talents for a small and selective audience are not applicable to art forms produced by a gigantic industry for the population at large. The beginnings of investigation on this problem are sufficiently suggestive to warrant further study.

Sporadic and consequently inconclusive experiments in the raising of standards have met with profound resistance from mass audiences. On occasion, radio stations and networks have attempted to supplant a soap opera with a program of classical music, or formula comedy skits with discussions of public issues. In general, the people supposed to benefit by this reformation of program have simply refused to be benefited. They cease listening. The audience dwindles. Researchers have shown, for example, that radio programs of classical music tend to preserve rather than to create interest in classical music and that newly emerging interests are typically superficial. Most listeners to these programs have previously acquired an interest in classical music; the few whose interest is initiated by the programs are caught up by melodic compositions and come to think of classical music exclusively in terms of Tchaikovsky or Rimski-Korsakov or Dvořák.

Proposed solutions to these problems are more likely to be born of faith than knowledge. The improvement of mass tastes through the improvement of mass art products is not as simple a matter as we should like to believe. It is possible, of course, that a conclusive effort has not been made. By a triumph of imagination over the current organization of mass media, one can conceive a rigorous censorship over all media, such that nothing was allowed in print or on the air or in the films save "the best that has been thought and said in the world." Whether a radical change in the supply of mass art would in due course reshape the tastes of mass audiences must remain a matter of speculation. Decades of experimentation and research

are needed. At present, we know conspicuously little about the methods of improving aesthetic tastes, and we know that some of the suggested methods are ineffectual. We have a rich knowledge of failures. Should this discussion be reopened in 1976, we may, perhaps, report with equal confidence our knowledge of positive achievements.

At this point, we may pause to glance at the road we have traveled. By way of introduction, we considered the seeming sources of widespread concern with the place of mass media in our society. Thereafter, we first examined the social role ascribable to the sheer existence of the mass media and concluded that this may have been exaggerated. In this connection, however, we noted several consequences of the existence of mass media: their status-conferral function, their function in inducing the application of social norms, and their narcotizing dysfunction. Second, we indicated the constraints placed by a structure of commercialized ownership and control upon the mass media as agencies of social criticism and as carriers of high aesthetic standards.

We turn now to the third and last aspect of the social role of the mass media: the possibilities of utilizing them for moving toward designated types of social objectives.

Propaganda for Social Objectives

This final question is perhaps of more direct interest to you than the other questions we have discussed. It represents something of a challenge to us since it provides the means of resolving the apparent paradox to which we referred previously: the seeming paradox arising from the assertion that the significance of the sheer existence of the mass media has been exaggerated and the multiple indications that the media do exert influences upon their audiences.

What are the conditions for the effective use of mass media for what might be called "propaganda for social objectives"—the promotion, let us say, of nondiscriminatory race relations, or of educational reforms, or of positive attitudes toward organized labor? Research indicates that, at least, one or more of

three conditions must be satisfied if this propaganda is to prove effective. These conditions may be briefly designated as (1) monopolization, (2) canalization rather than change of basic values, and (3) supplementary face-to-face contact. Each of these conditions merits some discussion.

Monopolization

This situation obtains when there is little or no opposition in the mass media to the diffusion of values, policies, or public images. That is to say, monopolization of the mass media occurs in the absence of counterpropaganda.

In this restricted sense, monopolization of the mass media is found in diverse circumstances. It is, of course, indigenous to the political structure of authoritarian society, where access to the media of communication is wholly closed to those who oppose the official ideology. The evidence suggests that this monopoly played some part in enabling the Nazis to maintain their control of the German people.

But this same situation is approximated in other social systems. During the war, for example, our government utilized the radio, with some success, to promote and to maintain identification with the war effort. The effectiveness of these morale-building efforts was in large measure due to the virtually complete absence of counterpropaganda.

Similar situations arise in the world of commercialized propaganda. The mass media create popular idols. The public images of the radio performer, Kate Smith, for example, picture her as a woman with unparalleled understanding of other American women, deeply sympathetic with ordinary men and women, a spiritual guide and mentor, a patriot whose views on public affairs should be taken seriously. Linked with the cardinal American virtues, the public images of Kate Smith are at no point subject to a counterpropaganda. Not that she has no competitors in the market of radio advertising. But there are none who set themselves systematically to question what she has said. In consequence, an unmarried radio entertainer with an annual income in six figures may be visualized by millions

of American women as a hard-working mother who knows the recipe for managing life on fifteen hundred a year.

This image of a popular idol would have far less currency were it subjected to counterpropaganda. Such neutralization occurs, for example, as a result of preelection campaigns by Republicans and Democrats. By and large, as a recent study has shown, the propaganda issued by each of these parties neutralizes the effect of the other's propaganda. Were both parties to forgo their campaigning through the mass media entirely, it is altogether likely that the net effect would be to reproduce the present distribution of votes.

This general pattern has been described by Kenneth Burke in his *Attitudes toward History*: "businessmen compete with one another by trying to *praise their own commodity* more persuasively than their rivals, whereas politicians compete by slandering the *opposition*. When you add it all up, you get a grand total of absolute praise for business and grand total of absolute slander for politics."

To the extent that opposing political propaganda in the mass media are balanced, the net effect is negligible. The virtual monopolization of the media for given social objectives, however, will produce discernible effects upon audiences.

Canalization

Prevailing beliefs in the enormous power of mass communications appear to stem from successful cases of monopolistic propaganda or from advertising. But the leap from the efficacy of advertising to the assumed efficacy of propaganda aimed at deep-rooted attitudes and ego-involved behavior is as unwarranted as it is dangerous. Advertising is typically directed toward the canalizing of preexisting behavior patterns or attitudes. It seldom seeks to instill new attitudes or to create significantly new behavior patterns. "Advertising pays" because it generally deals with a simple psychological situation. For Americans who have been socialized in the use of a toothbrush, it makes relatively little difference which brand of toothbrush they use. Once the gross pattern of behavior or the generic atti-

tude has been established, it can be canalized in one direction or another. Resistance is slight. But mass propaganda typically meets a more complex situation. It may seek objectives which are at odds with deep-lying attitudes. It may seek to reshape rather than to canalize current systems of values. And the successes of advertising may only highlight the failures of propaganda. Much of the current propaganda which is aimed at abolishing deep-seated ethnic and racial prejudices, for example, seems to have had little effectiveness.

Media of mass communication, then, have been effectively used to canalize basic attitudes, but there is little evidence of their having served to change these attitudes.

Supplementation

Mass propaganda which is neither monopolistic nor canalizing in character may, nonetheless, prove effective if it meets a third condition: supplementation through face-to-face contacts.

A case in point will illustrate the interplay between mass media and face-to-face influences. The seeming propagandistic success achieved some years ago by Father Coughlin does not appear, upon inspection, to have resulted primarily from the propaganda content of his radio talks. It was, rather, the product of these centralized propaganda talks *and* widespread local organizations which arranged for their members to listen to him, followed by discussions among themselves concerning the social views he had expressed. This combination of a central supply of propaganda (Coughlin's addresses on a nationwide network), the coordinated distribution of newspapers and pamphlets and locally organized face-to-face discussions among relatively small groups—this complex of reciprocal reinforcement by mass media and personal relations proved spectacularly successful.

Students of mass movements have come to repudiate the view that mass propaganda in and of itself creates or maintains the movement. Nazism did not attain its brief moment of hegemony by capturing the mass media of communication. The media played an ancillary role, supplementing the use of orga-

nized violence, organized distribution of rewards for conformity, and organized centers of local indoctrination. The Soviet Union has also made large and impressive use of mass media for indoctrinating enormous populations with appropriate ideologies. But the organizers of indoctrination saw to it that the mass media did not operate alone. "Red corners," "reading huts," and "listening stations" comprised meeting places in which groups of citizens were exposed to the mass media in common. The 55,000 reading rooms and clubs which had come into being by 1933 enabled the local ideological elite to talk over with rank-and-file readers the content of what they read. The relative scarcity of radios in private homes again made for group listening and group discussions of what had been heard.

In these instances, the machinery of mass persuasion included face-to-face contact in local organizations as an adjunct to the mass media. The privatized individual response to the materials presented through the channels of mass communication was considered inadequate for transforming exposure to propaganda into effectiveness of propaganda. In a society such as our own, where the pattern of bureaucratization has not yet become so pervasive or, at least, not so clearly crystallized, it has likewise been found that mass media prove most effective in conjunction with local centers of organized face-to-face contact.

Several factors contribute to the enhanced effectiveness of this joining of mass media and direct personal contact. Most clearly, the local discussions serve to reinforce the content of mass propaganda. Such mutual confirmation produces a "clinching effect." Second, the central media lessen the task of the local organizer, and the personnel requirements for such subalterns need not be as rigorous in a popular movement. The subalterns need not set forth the propaganda content for themselves, but need only pilot potential converts to the radio where the doctrine is being expounded. Third, the appearance of a representative of the movement on a nationwide network, or his mention in the national press, serves to symbolize the legitimacy and significance of the movement. It is no powerless, inconsequential enterprise. The mass media, as we have seen, confer status. And the status of the national movement reflects

back on the status of the local cells, thus consolidating the tentative decisions of its members. In this interlocking arrangement, the local organizer ensures an audience for the national speaker, and the national speaker validates the status of the local organizer.

This brief summary of the situations in which the mass media achieve their maximum propaganda effect may resolve the seeming contradiction which arose at the outset of our discussion. The mass media prove most effective when they operate in a situation of virtual "psychological monopoly," or when the objective is one of canalizing rather than modifying basic attitudes or when they operate in conjunction with face-to-face contacts.

But these three conditions are rarely satisfied conjointly in propaganda for social objectives. To the degree that monopolization of attention is rare, opposing propagandas have free play in a democracy. And, by and large, basic social issues involve more than a mere canalizing of preexistent basic attitudes; they call, rather, for substantial changes in attitude and behavior. Finally, for the most obvious of reasons, the close collaboration of mass media and locally organized centers for face-to-face contact has seldom been achieved in groups striving for planned social change. Such programs are expensive. And it is precisely these groups which seldom have the large resources needed for these expensive programs. The forward-looking groups at the edges of the power structure do not ordinarily have the large financial means of the contented groups at the center.

As a result of this threefold situation, the present role of media is largely confined to peripheral social concerns and the media do not exhibit the degree of social power commonly attributed to them.

By the same token, and in view of the present organization of business ownership and control of the mass media, they have served to cement the structure of our society. Organized business does approach a virtual "psychological monopoly" of the mass media. Radio commercials and newspaper advertisements are, of course, premised on a system which has been termed free enterprise. Moreover, the world of commerce is primarily

concerned with canalizing rather than radically changing basic attitudes; it seeks only to create preferences for one rather than another brand of product. Face-to-face contacts with those who have been socialized in our culture serve primarily to reinforce the prevailing culture patterns.

Thus the very conditions which make for the maximum effectiveness of the mass media of communication operate toward the maintenance of the going social and cultural structure rather than toward its change.

HADLEY CANTRIL

The Invasion from Mars

The panic that resulted from Orson Welles's Halloween radio broadcast in 1938 shocked radio broadcasters as well as listeners. Listening now to the records of that broadcast, it seems impossible that any such result should have come from it. But people did panic, and some of them ran for the hills. A group of social scientists studied what happened, and their report was published in a volume entitled *The Invasion from Mars*, by Hadley Cantril, Hazel Gaudet, and Herta Herzog. This paper is a summary of part of the larger volume; it explains the research team's conclusions as to why certain people panicked and others did not, and what there was in the broadcast and in the situation that made such a dramatic effect possible. This summary appeared first in Newcomb, Hartley, et al., *Readings in Social Psychology*, published and copyrighted by Henry Holt & Company (New York, 1947). It is reprinted here by permission of author and copyright holder. When this was written, the late Dr. Cantril was professor of psychology at Princeton.

ON THE EVENING of October 30, 1938, thousands of Americans became panic-stricken by a broadcast purported to describe an invasion of Martians which threatened our whole civilization. Probably never before have so many people in all walks of life and in all parts of the country become so suddenly and so intensely disturbed as they did on this night.

Such rare occurrences provide opportunities for the social scientist to study mass behavior. They must be exploited when they come. Although the social scientist unfortunately cannot usually predict such situations and have his tools of investigation ready to analyze the phenomenon while it is still on the wing, he can begin his work before the effects of the crisis are over and memories are blurred. The situation created by the broadcast was one which shows us how the common man reacts in a time of stress and strain. It gives us insights into his intelligence, his anxieties, and his needs, which we could never get by tests or strictly experimental studies. The panic situation we have investigated had all the flavor of everyday life and, at the same time, provided a semi-experimental condition for re-

search. In spite of the unique conditions giving rise to this particular panic, the writer has attempted to indicate throughout the study the pattern of the circumstances which, from a psychological point of view, might make this the prototype of any panic.

The fact that this panic was created as a result of a radio broadcast is today no mere circumstance. The importance of radio's role in current national and international affairs is too well known to be recounted here. By its very nature radio is the medium par excellence for informing all segments of a population of current happenings, for arousing in them a common sense of fear or joy, and for exciting them to similar reactions directed toward a single objective.

Because the social phenomenon in question was so complex, several methods were employed to seek out different answers and to compare results obtained by one method with those obtained by another. Much of our information was derived from detailed interviews of 135 persons. Over 100 of these persons were selected because they were known to have been upset by the broadcast.

Long before the broadcast had ended, people all over the United States were praying, crying, fleeing frantically to escape death from the Martians. Some ran to rescue loved ones. Others telephoned farewells or warnings, hurried to inform neighbors, sought information from newspapers or radio stations, summoned ambulances and police cars. At least six million people heard the broadcast. At least a million of them were frightened or disturbed.

For weeks after the broadcast, newspapers carried human-interest stories relating the shock and terror of local citizens. Men and women throughout the country could have described their feelings and reactions on that fateful evening. Our own interviewers and correspondents gathered hundreds of accounts. A few of these selected almost at random will give us a glimpse of the excitement. Let the people speak for themselves.

"I knew it was something terrible and I was frightened," said Mrs. Ferguson, a northern New Jersey housewife, to the inquiring interviewer. "But I didn't know just what it was. I couldn't

make myself believe it was the end of the world. I've always heard that when the world would come to an end, it would come so fast nobody would know—so why should God get in touch with this announcer? When they told us what road to take and get up over the hills and the children began to cry, the family decided to go out. We took blankets and my granddaughter wanted to take the cat and the canary. We were outside the garage when the neighbor's boy came back and told us it was a play."

From a small midwestern town came Joseph Hendley's report. "That Hallowe'en Boo sure had our family on its knees before the program was half over. God knows how we prayed to Him last Sunday. It was a lesson in more than one thing to us. My mother went out and looked for Mars. Dad was hard to convince or skeptical or sumpin', but he even got to believing it. Brother Joe, as usual, got more excited than he could show. Brother George wasn't home. Aunt Grace, a good Catholic, began to pray with Uncle Henry. Lily got sick to her stomach. I don't know what I did exactly but I know I prayed harder and more earnestly than ever before. Just as soon as we were convinced that this thing was real, how pretty all things on earth seemed; how soon we put our trust in God."

Archie Burbank, a filling station operator in Newark, described his reactions. "My girl friend and I stayed in the car for a while, just driving around. Then we followed the lead of a friend. All of us ran into a grocery store and asked the man if we could go into his cellar. He said, 'What's the matter? Are you trying to ruin my business?' So he chased us out. A crowd collected. We rushed to an apartment house and asked the man in the apartment to let us in his cellar. He said, 'I don't have any cellar! Get away!' Then people started to rush out of the apartment house all undressed. We got into the car and listened some more. Suddenly, the announcer was gassed, the station went dead so we tried another station but nothing would come on. Then we went to a gas station and filled up our tank in preparation for just riding as far as we could. The gas station man didn't know anything about it. Then one friend, male, decided he would call up the *Newark Evening News*. He

found out it was a play. We listened to the rest of the play and then went dancing."

Mrs. Joslin, who lives in a poor section of a large eastern city and whose husband is a day laborer, said, "I was terribly frightened. I wanted to pack and take my child in my arms, gather up my friends, and get in the car and just go north as far as we could. But what I did was just set by one window, prayin', listenin', and scared stiff and my husband by the other sniffin' and lookin' out to see if people were runnin'. Then when the announcer said 'evacuate the city,' I ran and called my boarder and started with my child to rush down the stairs, not waitin' to ketch my hat or anything. When I got to the foot of the stairs I just couldn't get out, I don't know why. Meantime my husband he tried other stations and found them still runnin'. He couldn't smell any gas or see people runnin', so he called me back and told me it was just a play. So I set down, still ready to go at any minute till I heard Orson Welles say, 'Folks, I hope we ain't alarmed you. This is just a play!' Then, I just set!"

If we are to explain the reaction, then, we must answer two basic questions: Why did this broadcast frighten some people when other fantastic broadcasts do not? And why did this broadcast frighten some people but not others? An answer to the first question must be sought in the characteristics of this particular program which aroused false standards of judgment in so many listeners.

No one reading the script can deny that the broadcast was so realistic for the first few minutes that it was almost credible to even relatively sophisticated and well-informed listeners. The sheer dramatic excellence of the broadcast must not be overlooked. This unusual realism of the performance may be attributed to the fact that the early parts of the broadcast fell within the existing standards of judgment of the listeners.

A large proportion of listeners, particularly those in the lower income and educational brackets, have grown to rely more on the radio than on the newspapers for their news. Almost all of the listeners, who had been frightened and who were interviewed, mentioned somewhere during the course of

their retrospections the confidence they had in radio and their expectation that it would be used for such important announcements. A few of their comments indicate their attitudes:

"We have so much *faith in broadcasting*. In a crisis it has to reach all people. That's what radio is here for."

"The announcer would not say if it was not true. *They always quote if something is a play.*"

As in many situations where events and ideas are so complicated or far removed from one's own immediate everyday experience that only the expert can really understand them, here, too, the layman was forced to rely on the expert for his interpretation.

The logical "expert" in this instance was the astronomer. Those mentioned (all fictitious) were Professor Farrell of the Mount Jennings Observatory of Chicago, Professor Pierson of the Princeton Observatory, Professor Morse of MacMillan University in Toronto, Professor Indellkoffer of the California Astronomical Society and "astronomers and scientific bodies" in England, France, and Germany. Professor Richard Pierson (Orson Welles) was the chief character in the drama.

When the situation called for organized defense and action the expert was once more brought in. General Montgomery Smith, commander of the state militia at Trenton, Mr. Harry McDonald, vice-president of the Red Cross, Captain Lansing of the Signal Corps, and finally the Secretary of the Interior described the situation, gave orders for evacuation and attack, or urged every man to do his duty.

This dramatic technique had its effect.

"I believed the broadcast *as soon as I heard the professor from Princeton* and the officials in Washington."

"I knew it was an awfully dangerous situation *when all those military men were there and the Secretary of State spoke.*"

The realistic nature of the broadcast was further enhanced by descriptions of particular occurrences that listeners could readily imagine. Liberal use was made of the colloquial expressions to be expected on such an occasion. The gas was "a sort of yellowish-green"; the cop warned, "One side, there. Keep back, I tell you"; a voice shouts, "The darn thing's unscrewing." An

example of the specificity of detail is the announcement of Brigadier General Montgomery Smith: "I have been requested by the Governor of New Jersey to place the counties of Mercer and Middlesex as far west as Princeton, and east to Jamesburg, under martial law. No one will be permitted to enter this area except by special pass issued by state or military authorities. Four companies of state militia are proceeding from Trenton to Grovers Mill and will aid in the evacuation of homes within the range of military operations."

The events reported proceeded from the relatively credible to the highly incredible. The first announcements were more or less believable, although unusual to be sure. First there is an "atmospheric disturbance," then "explosions of incandescent gas." A scientist then reports that his seismograph has registered a shock of earthquake intensity. This is followed by the discovery of a meteorite that has splintered nearby trees in its fall. So far so good.

But as the less credible bits of the story begin to enter, the clever dramatist also indicates that he, too, has difficulty in believing what he sees. When we learn that the object is no meteorite but a metal casing, we are also told that the whole picture is "a strange scene like something out of a modern Arabian Nights," "fantastic," that the "more daring souls are venturing near." Before we are informed that the end of the casing is beginning to unscrew, we experience the announcer's own astonishment: "Ladies and gentlemen, this is terrific!" When the top is off he says, "This is the most terrifying thing I have ever witnessed. . . . This is the most extraordinary experience. I can't find words. . . ."

The bewilderment of the listener is shared by the eye-witness. When the scientist is himself puzzled, the layman recognizes the extraordinary intelligence of the strange creatures. No explanation of the event can be provided. The resignation and hopelessness of the Secretary of the Interior, counseling us to "place our faith in God," provides no effective guide for action.

In spite of the realism of the broadcast, it would seem highly unlikely that any listener would take it seriously had he heard the announcements that were clearly made at the beginning of

the hour. He might then have been excited, even frightened. But it would be an excitement based on the dramatic realism of the program. There would not be the intense feeling of personal involvement. He would know that the events were happening "out there" in the studio, not "right here" in his own state or his own county. In one instance a "correct" (aesthetically detached or dramatic) standard of judgment would be used by the listener to interpret events, in another instance a "false" (realistic or news) standard of judgment would be employed. Tuning in late was a very essential condition for the arousal of a false standard of judgment. To be sure, many people recognized the broadcast as a play even though they tuned in late. It is important to raise and to answer the question of how anyone who tuned in at the beginning could have mistaken the clearly introduced play for a news broadcast. Analysis of these cases reveals two main reasons why such a misinterpretation arose. In the first place, many people who tuned in to hear a play by the Mercury Theatre thought the regular dramatic program had been interrupted to give special news bulletins. The technique was not a new one after their experience with radio reporting of the war crisis in September, 1938. The other major reason for the misunderstanding is the widespread habit of not paying attention to the first announcements of a program. Some people do not listen attentively to their radios until they are aware that something of particular interest is being broadcast.

Tuning in late was very decisive in determining whether or not the listener would follow the program as a play or as a news report. For the story of the Martian invasion was so realistic that misinterpretation was apt to arise without proper warning signals.

In spite of the fact that many persons tuned in late to hear this very realistic broadcast, by no means all of them believed it was news. And not all of those who thought the invasion was upon them behaved the same way in the face of danger. Before we can understand the reasons for the varying behavior, the reactions must be arranged in some significant grouping. Otherwise no fruitful conceptualization is possible.

Classifying the Listeners

1. THOSE WHO CHECKED THE INTERNAL EVIDENCE OF THE BROADCAST

The persons in this category were those who did not remain frightened throughout the whole broadcast because they were able to discern that the program was fictitious. Some realized that the reports must be false because they sounded so much like certain fiction literature they were accustomed to.

"At first I was very interested in the fall of the meteor. It isn't often that they find a big one just when it falls. But *when it started to unscrew and monsters came out, I said to myself, 'They've taken one of those Amazing Stories and are acting it out.'* It just couldn't be real. It was just like some of the stories I read in *Amazing Stories* but it was even more exciting."

2. THOSE WHO CHECKED THE BROADCAST AGAINST OTHER INFORMATION AND LEARNED THAT IT WAS A PLAY

These listeners tried to orient themselves for the same reasons as those in the first group—they were suspicious of the "news" they were getting. Some simply thought the reports were too fantastic to believe; others detected the incredible speeds revealed; while a few listeners checked the program just because it seemed the reasonable thing to do. Their method of verifying their hunches was to compare the news on the program to some other information.

"I tuned in and heard that a meteor had fallen. Then when they talked about monsters, I thought something was wrong. So *I looked in the newspaper* to see what program was supposed to be on and discovered it was only a play."

3. THOSE WHO TRIED TO CHECK THE PROGRAM AGAINST OTHER INFORMATION BUT WHO, FOR VARIOUS REASONS, CONTINUED TO BELIEVE THE BROADCAST WAS AN AUTHENTIC NEWS REPORT

Two characteristic differences separated the people in this group from those who made successful checks. In the first

place, it was difficult to determine from the interviews just why these people wanted to check anyway. They did not seem to be seeking evidence to test the authenticity of the reports. They appeared, rather, to be frightened souls trying to find out whether or not they were yet in any personal danger. In the second place, the type of checking behavior they used was singularly ineffective and unreliable. The most frequent method employed by almost two-thirds of this group was to look out the window or go outdoors. Several of them telephoned their friends or ran to consult their neighbors.

There are several reasons why the checks made by these persons were ineffectual. For some of them, the new information obtained only verified the interpretation which their already fixed standard of judgment provided.

"I looked out of the window and everything looked the same as usual so I thought it hadn't reached our section yet."

"We looked out of the window and Wyoming Avenue was black with cars. People were rushing away, I figured."

"No cars came down my street. 'Traffic is jammed on account of the roads being destroyed,' I thought."

4. THOSE WHO MADE NO ATTEMPT TO CHECK THE BROADCAST OR THE EVENT

It is usually more difficult to discover why a person did *not* do something than why he did. Consequently it is more difficult for us to explain why people in this group did not attempt to verify the news or look for signs of the Martians in their vicinity than it was to determine why those who attempted unsuccessful checks displayed their aimless behavior. Over half of the people in this group were so frightened that they either stopped listening, ran around in a frenzy, or exhibited behavior that can only be described as paralyzed.

Some of them reported that they were so frightened they never thought of checking.

"We were so intent upon listening that we didn't have enough sense to try other hook-ups—we were just so frightened."

Others adopted an attitude of complete resignation. For them any attempt to check up, like any other behavior, appeared senseless.

"I was writing a history theme. The girl from upstairs came and made me go up to her place. Everybody was so excited I felt as if I was going crazy and kept on saying, 'What can we do, *what difference does it make* whether we die sooner or later?' We were holding each other. Everything seemed unimportant in the face of death. I was afraid to die, just kept on listening."

Some felt that in view of the crisis situation, action was demanded. A few prepared immediately for their escape or for death.

"I couldn't stand it so I turned it off. I don't remember when, but everything was coming closer. My husband wanted to put it back on but I told him *we'd better do something instead of just listen*, so we started to pack."

Some listeners interpreted the situation in such a way that they were not interested in making a check-up. In a few instances the individual tuned in so late that he missed the most incredible parts of the program and was only aware of the fact that some kind of conflict was being waged.

"I was in my drugstore and my brother phoned and said, 'Turn the radio on, a meteor has just fallen.' We did and heard gas was coming up South Street. There were a few customers and *we all began wondering where it could come from*. I was worried about the gas, it was spreading so rapidly but I was puzzled as to what was actually happening, when I heard airplanes I thought another country was attacking us."

Why the Panic?

A variety of influences and conditions are related to the panic resulting from this particular broadcast. We have found no single observable variable consistently related to the reaction, although a lack of critical ability seemed particularly conducive to fear in a large proportion of the population. Personality characteristics made some people especially susceptible to be-

lief and fright; the influence of others in the immediate environment caused a few listeners to react inappropriately. The psychological pattern revealed by these and other influences must be shown if we are to understand the situation as a whole and not have to resort exclusively to the understanding of single, isolated cases.

Why the Suggestion Was or Was Not Believed

What is most inconceivable and therefore especially interesting psychologically is why so many people did not do something to verify the information they were receiving from their loudspeakers. The failure to do this accounts for the persistence of the fright. To understand any panic—whether the cause is a legitimate one or not—it is necessary to see precisely what happens to an individual's mental processes that prevents him from making an adequate check-up.

The persons who were frightened by the broadcast were, for this occasion at least, highly suggestible, that is, they believed what they heard without making sufficient checks to prove to themselves that the broadcast was only a story. Those who were not frightened and those who believed the broadcast for only a short time were not suggestible—they were able to display what psychologists once called a "critical faculty." The problem is, then, to determine why some people are suggestible, or to state the problem differently, why some people lack critical ability.

There are essentially four psychological conditions that create in an individual the particular state of mind we know as suggestibility. All these may be described in terms of the concept of standard of judgment.

In the first place, individuals may refer a given stimulus to a standard or to several standards of judgment which they think are relevant for interpretation. The mental context into which the stimulus enters in this case is of such a character that it is welcomed as thoroughly consistent and without contradiction. A person with standards of judgment that enable him to "place" or "give meaning to" a stimulus in an almost automatic

way finds nothing incongruous about such acceptance; his standards have led him to "expect" the possibility of such an occurrence.

We have found that many of the persons who did not even try to check the broadcast had preexisting mental sets that made the stimulus so understandable to them that they immediately accepted it as true. Highly religious people who believed that God willed and controlled the destinies of man were already furnished with a particular standard of judgment that would make an invasion of our planet and a destruction of its members merely an "act of God." This was particularly true if the religious frame of reference was of the eschatological variety providing the individual with definite attitudes or beliefs regarding the end of the world. Other people we found had been so influenced by the recent war scare that they believed an attack by a foreign power was imminent and an invasion—whether it was due to the Japanese, Hitler, or Martians—was not unlikely. Some persons had built up such fanciful notions of the possibilities of science that they could easily believe the powers of strange superscientists were being turned against them, perhaps merely for experimental purposes.

Whatever the cause for the genesis of the standards of judgment providing ready acceptance of the event, the fact remains that many persons already possessed a context within which they immediately placed the stimulus. None of their other existing standards of judgment was sufficiently relevant to engender disbelief. We found this to be particularly true of persons whose lack of opportunities or abilities to acquire information or training had insufficiently fortified them with pertinent standards of judgment that would make the interpretation of the broadcast as a play seem plausible. More highly educated people, we found, were better able to relate a given event to a standard of judgment they *knew* was an *appropriate* referent. In such instances, the knowledge itself was used as a standard of judgment to discount the information received in the broadcast. These listeners, then, had the ability to refer to relevant standards of judgment which they could rely on for checking purposes and therefore had no need of further orientation.

A second condition of suggestibility exists when an individual is not sure of the interpretation he should place on a given stimulus and when he lacks adequate standards of judgment to make a reliable check on his interpretation. In this situation the individual attempts to check on his information but fails for one of three reasons. (1) He may check his original information against unreliable data which may themselves be affected by the situation he is checking. We found that persons who checked unsuccessfully tended to check against information obtained from friends or neighbors. Obviously, such people were apt themselves to be tinged with doubt and hesitation which would only confirm early suspicions. (2) A person may rationalize his checking information according to the original hypothesis he is checking and which he thinks he has only tentatively accepted. Many listeners made hasty mental or behavioral checks but the false standard of judgment they had already accepted was so pervasive that their check-ups were rationalized as confirmatory evidence. For example, one woman said that the announcer's charred body was found too quickly but she "figured the announcer was excited and had made a mistake." A man noticed the incredible speeds but thought "they were relaying reports or something." Others turned to different stations but thought the broadcasters were deliberately trying to calm the people. A woman looked out of her window and saw a greenish eerie light which she thought was from the Martians. (3) In contrast to those who believe almost any check they make are the people who earnestly try to verify their information but do not have sufficiently well-grounded standards of judgment to determine whether or not their new sources of information are reliable.

A third and perhaps more general condition of suggestibility exists when an individual is confronted with a stimulus which he must interpret or which he would like to interpret and when *none* of his existing standards of judgment is adequate to the task. On such occasions the individual's mental context is unstructured, the stimulus does not fit any of his established categories and he seeks a standard that will suffice him. The less structured his mental context, the fewer meanings he is

able to call forth, the less able will he be to understand the relationship between himself and the stimulus, and the greater will become his anxiety. And the more desperate his need for interpretation, the more likely will he be to accept the first interpretation given him. Many conditions existed to create in the individuals who listened to the invasion from Mars a chaotic mental universe that contained no stable standards of judgment by means of which the strange event reported could be evaluated. A lack of information and formal educational training had left many persons without any generalized standards of judgment applicable to this novel situation. And even if they did have a few such standards these were vague and tenuously held because they had not proved sufficient in the past to interpret other phenomena. This was especially true of those persons who had been most adversely affected by the conditions of the times.

The prolonged economic unrest and the consequent insecurity felt by many of the listeners was another cause for bewilderment. The depression had already lasted nearly ten years. People were still out of work. Why didn't somebody do something about it? Why didn't the experts find a solution? What was the cause of it anyway? Again, what would happen, no one could tell. Again, a mysterious invasion fitted the pattern of the mysterious events of the decade. The lack of a sophisticated, relatively stable economic or political frame of reference created in many persons a psychological disequilibrium which made them seek a standard of judgment for this particular event. It was another phenomenon in the outside world beyond their control and comprehension. Other people possessed certain economic security and social status but wondered how long this would last with "things in such a turmoil." They, too, sought a stable interpretation, one that would at least give this new occurrence meaning. The war scare had left many persons in a state of complete bewilderment. They did not know what the trouble was all about or why the United States should be so concerned. The complex ideological, class, and national antagonisms responsible for the crises were by no means fully comprehended. The situation was painfully serious and distressingly

confused. What would happen, nobody could foresee. The Martian invasion was just another event reported over the radio. It was even more personally dangerous and no more enigmatic. No existing standards were available to judge its meaning or significance. But there was quick need for judgment, and it was provided by the announcers, scientists, and authorities.

Persons with higher education, on the other hand, we found had acquired more generalized standards of judgment which they could put their faith in. The result was that many of them "knew" that the phenomenal speeds with which the announcers and soldiers moved was impossible even in this day and age. The greater the possibility of checking against a variety of reliable standards of judgment, the less suggestible will a person be. We found that some persons who in more normal circumstances might have had critical ability were so overwhelmed by their particular listening situation that their better judgment was suspended. This indicates that a highly consistent structuration of the external stimulus world may, at times, be experienced with sufficient intensity because of its personal implications to inhibit the operation of usually applicable internal structurations or standards of judgment. Other persons who may normally have exhibited critical ability were unable to do so in this situation because their own emotional insecurities and anxieties made them susceptible to suggestion when confronted with a personally dangerous circumstance. In such instances, the behavioral consequence is the same as for a person who has no standards of judgment to begin with, but the psychological processes underlying the behavior are different.

A fourth condition of suggestibility results when an individual not only lacks standards of judgment by means of which he may orient himself, but lacks even the realization that any interpretations are possible other than the one originally presented. He accepts as truth whatever he hears or reads without even thinking to compare it to other information.

Why Such Extreme Behavior?

Granted that some people believed the broadcast to be true, why did they become so hysterical? Why did they pray, telephone relatives, drive at dangerous speeds, cry, awaken sleeping children, and flee? Of all the possible modes of reaction they may have followed, why did these particular patterns emerge? The obvious answer is that this was a serious affair. As in all other panics, the individual believed his well-being, his safety, or his life was at stake. The situation was a real threat to him. Just what constitutes a personal threat to an individual must be briefly examined.

When an individual believes that a situation threatens him he means that it threatens not only his physical self but all of those things and people which he somehow regards as a part of him. This ego of an individual is essentially composed of the many social and personal values *he* has accepted. *He* feels threatened if his investments are threatened, *he* feels insulted if his children or parents are insulted, *he* feels elated if his alma mater wins the sectional football cup. The particular pattern of values that have been introcepted by an individual will give him, then, a particular ego. For some individuals this is expanded to include broad ideals and ambitions. *They* will be disturbed if a particular race is persecuted in a distant country because that persecution runs counter to their ideal of human justice and democracy; *they* will be flattered if someone admires an idea of theirs or a painting they have completed.

A panic occurs when some highly cherished, rather commonly accepted value is threatened and when no certain elimination of the threat is in sight. The individual feels that he will be ruined, physically, financially, or socially. The invasion of the Martians was a direct threat to life, to other lives that one loved, as well as to all other cherished values. The Martians were destroying practically everything. The situation was, then, indeed a serious affair. Frustration resulted when no directed behavior seemed possible. One was faced with the alternative of resigning oneself and all of one's values to complete

annihilation, or of making a desperate effort to escape from the field of danger, or of appealing to some higher power or stronger person whom one vaguely thought could destroy the oncoming enemy.

If one assumed that destruction was inevitable, then certain limited behavior was possible: one could cry, make peace with one's Maker, gather one's loved ones around and perish. If one attempted escape, one could run to the house of friends, speed away in a car or train, or hide in some gas-proof, bomb-proof, out-of-the-way shelter. If one still believed that something or someone might repulse the enemy, one could appeal to God or seek protection from those who had protected one in the past. Objectively, none of these modes of behavior was a direct attack on the problem at hand; nothing was done to remove the cause of the crisis. The behavior in a panic is characteristically undirected and, from the point of view of the situation at hand, functionally useless.

In short, the extreme behavior evoked by the broadcast was due to the enormous ego-involvement the situation created and to the complete inability of the individual to alleviate or control the consequences of the invasion. The coming of the Martians did not present a situation where the individual could preserve one value if he sacrificed another. It was not a matter of saving one's country by giving one's life, of helping to usher in a new religion by self-denial, of risking the thief's bullet to save the family silver. In this situation the individual stood to lose *all* his values at once. Nothing could be done to save *any* of them. Panic was inescapable. The false standard of judgment used by the individual to interpret the broadcast was not itself the motivational cause of the behavior, but it was absolutely essential in arousing the needs and values which may be regarded as the sources of the actions exhibited. A false standard of judgment aroused by the broadcast and causing the individual to be disturbed had its roots in values which were a part of the ego.

DONALD F. ROBERTS AND WILBUR SCHRAMM

*Children's Learning
from the Mass Media*

The effect of television on children has been a matter of deep concern ever since the swift expansion of television in the 1950's. In particular, observers have wondered whether the large amount of violence on TV might produce a violent generation. Long-term effects such as these are difficult to study, but the relationship of children to television has been the subject of four major books and perhaps 100 studies, and, needless to say, a continuing argument in which spokesmen for commercial television have been arrayed against critics of violence in programming. The following paper is a brief and nontechnical summary of the evidence to date. It appeared in *The Encyclopedia of Education*, Lee C. Deighton, editor, published and copyrighted by the Macmillan Company, 1971, by whose permission it is here reprinted. Drs. Roberts and Schramm are members of the Institute for Communication Research at Stanford.

CHILDHOOD IS A PERIOD of information-seeking, when the child's central concern lies in defining a coherent picture of the world. For the twentieth-century child the picture is apt to be broad and complex. The mass media, especially the pictorial media to which he has access very early, expose him to the world far beyond the limits of his immediate experience. They present attitudes and values which may be different from those of family and peers, and information in quantities far greater than that available at firsthand. The media are such a ubiquitous part of children's lives, at a time when they are most open to new information, that an examination of the relationship between mass media and children yields some important conclusions.

Fundamentally, the mass media are "message multipliers," channels which increase the number and speed of messages sent and the size of the audience reached. While the relationship between sender and receiver is not the interpersonal one existing between two speakers face-to-face, a message transmitted by one of the mass media faces the same hurdles as a message

transmitted from father to child or teacher to student. Any message, to have an effect, must receive attention, interpretation, acceptance, and disposition. But just as there are large individual differences in how children are affected by communications from parents, teachers, or peers, so there are differences in how children use and are affected by the media.

Patterns of Media Use

Perhaps the most important conclusion emerging from research on children and the mass media is that media effects on children are contingent on how children use the media. They decide if, when, and to what they will attend; they interpret, accept, and dispose according to their own abilities and needs. Because of the diversity among children in talents, desires, and personalities, we cannot ask the straightforward question, "What are the effects of the mass media on children?" Rather we must ask, "Which media, under which conditions, lead to which effects, among which children?" It is the picture of an active child, bringing to the media the sum of his experiences, abilities, and needs, and taking from the media what he can and will, that we must attempt to sketch.

Amount of media use. Between the ages of three and sixteen the average American child devotes over one-sixth of his waking hours to watching television and gives additional time to other media—comics, movies, radio, newspapers. One study showed that children between the ages of five and eight spent over 42 percent of their leisure time with the various media; by the age of twelve, this figure increased to over 51 percent. Perhaps more important than the averages these figures represent is the variety of differences summarized by such an average. For example, in one sample of sixth-grade boys, television viewing time ranged from less than fifteen minutes to more than four hours per weekday.¹

Media use varies with age, IQ, creativeness, family socioeconomic status, season of the year, and so on. Preschool children

¹ Wilbur Schramm, Jack Lyle, and E. B. Parker, *Television in the Lives of Our Children* (Stanford: Stanford University Press, 1961).

typically watch television for more than three hours per day. Viewing time drops when the child begins school, then increases again to around three hours per day somewhere between the sixth and eighth grades. During the teenage years viewing again drops off. Related changes occur in use of other media. Comic-book reading, minimal among preschoolers, increases through childhood but declines to near zero in the middle and late teens. Use of the print media increases from the middle school years onward. Radio listening, an important part of adolescent culture, which can be engaged in simultaneously with other activities, shows a strong increase in the teenage years.²

Other differences occur within these age patterns. Among teenagers there is a negative relationship between creativity and the use of pictorial media, and no relationship between creativity and use of print media.³ Teenagers with high IQ's are less often among the ranks of heavy television viewers, tending more often to use the print media. Among preteen children, however, there appears to be no relationship between mental ability and television viewing. Very bright young children are likely to be heavy viewers, although this group is likely to use all the media—pictorial, print, radio, and so forth—more heavily.⁴

The amount of time parents spend with the various media has a strong effect upon children. A pattern of light or heavy television viewing and light or heavy print use will usually be consistent throughout a family. Children of highly educated parents tend not to watch as much television as children of less-educated parents. Children of middle-class parents who espouse the ideals of activity, work, and self-improvement view less than children of families not holding these ideals. Gener-

² Ibid.; Eleanor E. Maccoby, "Effects of the Mass Media," in M. L. Hoffman and Lewis W. Hoffman, eds., *Review of Child Development Research*, vol. 1 (New York: Russell Sage Foundation, 1964), pp. 323-48.

³ Serena E. Wade, *An Exploration into the Media Behavior of the Creative Adolescent* (unpublished Ph.D. dissertation, Stanford University, 1966).

⁴ Schramm et al., *Television in the Lives of Our Children*.

ally, socioeconomic status is positively related to use of print media and negatively related to use of pictorial media.⁵

The same variables which determine amount of viewing also influence content of viewing. Thus the child of lower intelligence or one from a poorly educated family is likely to select "entertainment" content as opposed to "reality" content, such as news or documentaries, that the brighter child, the child with well-educated parents, or the child from a middle-class home would probably select.

Determinants of media use. The preceding patterns of media use are best explained in terms of the ability, interests, and available time of the child. The advent of school cuts into the young child's viewing time; the demands of school, both academic and social, cut into the teenager's viewing time. As the child learns to read, the world of print opens to him. The time he now spends with newspapers, magazines, and books naturally subtracts from time spent with pictorial media. The creative child also is more likely to spend time on a wide variety of nonmedia activities, pursuing interests his less active counterparts might not consider. The total amount of time available for him to spend on the media is, therefore, greatly reduced.

However, these are typical, not absolute, patterns. Brighter children, children of middle-class families, and children of highly educated parents are also found in the ranks of heavy users of pictorial media. The determining elements here appear to be personal and social. Insecure children, particularly those who have difficulty making friends, are likely to be heavy users of the pictorial media. Children characterized by a high level of antisocial aggressive tendencies or by a need for immediate gratification are frequent users of comics, movies, and television. Among children of the higher social strata, those who experience more family conflict, who encounter many parental restrictions, and who are not warmly treated view more television. This relationship does not occur among children of

⁵ See M. Abrams, "Child Audiences for Television in Great Britain," *Journalism Quarterly* 33 (1956): 35-41. Also see Schramm et al., *Television in the Lives of Our Children*.

the lower socioeconomic classes, probably because they view less television.⁶

There is evidence, then, that under certain conditions children with personal or social problems search for escape in the pictorial media, obtaining vicariously some of the satisfactions not afforded by their life situations.

The functions of the media. Investigators have described three classes of reasons why children use television, reasons which pertain to the other mass media as well.⁷ One dimension of television's attractiveness is its social utility. It offers an excuse for children's being together, something for friends to enjoy in each other's company, and gives children common experiences about which to talk.

A second use of the pictorial media is as an information source. News and public affairs programs, much of the material in the print media, and documentary films clearly serve this function. Many children report that information garnered from such sources helps them with schoolwork by providing topics and material for themes. Programs not usually classed as "informational" also inform. Boys may learn to swing a bat by observing a baseball player on television; girls may learn about grooming or new hairdos from commercials or the entertainment programs. The rapid diffusion of teenage fads through our culture is a direct result of television's "informational" function.

Ironically, while children are willing to admit that the media, particularly television, pay this kind of incidental dividend, overt attempts by the pictorial media to be educational often irritate them. Children frequently class educational television as "square," something that adults have decided is good for them. They may accept the print media as justifiably educa-

⁶ See Eleanor E. Maccoby, "Why Do Children Watch Television?" *Public Opinion Quarterly* 18 (1954): 239-44; Hilde Himmelweit, A. N. Oppenheim, and Pamela Vince, *Television and the Child* (London: Oxford University Press, 1958); Lotte Bailyn, "Mass Media and Children: A Study of Exposure Habits and Cognitive Effects," *Psychological Monographs* 73, no. 1 (whole no. 471); Schramm et al., *Television in the Lives of Our Children*.

⁷ Schramm et al., *Television in the Lives of Our Children*.

tional, but television, movies, and comics are seen primarily as sources of entertainment. For example, one team of investigators hoped to put the attractiveness of comic books to work by using them for educational purposes. They offered third-graders a choice of learning about how fish swim by reading from a typed page, a textbook, or a comic book. Contrary to expectations, the comic book was the least preferred. The children explained that they liked comics for entertainment; for "authentic" information, they preferred texts.⁸

The third and most important reason children use the pictorial media, then, is for entertainment. The media provide everything from casual relaxation and time out from schoolwork or family duties to a fantasy world into which the troubled or disturbed child may escape. Entertainment is also the part of the media children find easiest to talk about, and its impact is readily seen in their behavior. They imitate movie and television idols; they trade comic books as intently as stockbrokers trade shares; the latest media catch phrases become part of their speech. In short, they respond to that aspect of the pictorial media which is most accessible—the continually available diet of entertainment.

Implicit in these functions of the media is a distinction, alluded to above, between two kinds of media fare—reality content and entertainment content. Reality content constantly refers the viewer to the real world, working chiefly through realistic materials and inviting alertness, activity, and cognition. Entertainment content invites the viewer to take leave of real-world problems, appealing to emotion and stressing fantasy and often withdrawal. While either type of content may be used in social interaction, as a source of information, or for entertainment, reality content (news, public affairs, etc.) primarily serves the function of supplying information, and entertainment content (westerns, crime programs, comedy, variety shows, sports, etc.) serves the function of ministering to immediate personality and social needs.

⁸ R. C. Wilson and E. J. Shaffer. "Reading Comics to Learn." *Elementary School Journal* 66 (1965): 81-82.

It follows that the type of media content used by a given child will, to some extent, influence how the child is affected by media use.

Effects of the Media

The term "effects" covers a broad variety of consequences. Effects may be indirect, as when time spent with the media takes children away from other activities, or direct, in that the child might learn a new fact or form of behavior from the media. Effects include such things as emotional responses, attitudinal shifts, or changes in a child's view of the world after exposure to certain kinds of media.

As with the preceding discussion of media usage, statements about effects refer to general patterns. The generalizations included in the following paragraphs refer to the average child, a persona created to make it easier to summarize a wide range of effects. Such generalizations should not be taken as dicta pertaining to every child who uses the media but as descriptions of patterns of effects within a group or mass audience of children.

Reallocation of time. Just as media use depends to a large extent on available time, so time spent with the media can reduce time spent on other activities. Whether such time shifts are good or bad depends on which activities the child ignores in favor of an afternoon with television or a stack of comics.

In general, the media appear to take little time from structured activities such as organized team sports, schoolwork, and family duties. Television may lead to a slight postponement in children's bedtimes, averaging between fifteen and twenty-five minutes per night. On the other hand, even though children may stay up a bit later to watch television, many parents report that they are likely to go right to sleep rather than to read in bed. Hence, the loss of sleep may be less than the change in bedtime indicates. There is evidence that those who stay up latest with television are those least able to afford it—children of lower intelligence, and children from homes where parental control is lax and where school performance is unimportant. Yet, in the United States and England, television appears to

have had a very minor effect on schoolwork. When intelligence is taken into account, there is little relationship between amount of viewing and school performance, and there seems to be no effect on time spent on homework. The child who watches television instead of completing his homework would probably do something else if television were not available.⁹

But the evidence is not unanimous. When television was first introduced in Japan, there was a decrement in the amount of time spent on homework and a loss in reading ability (especially among boys in grades five to seven) for the group of children whose families had recently acquired television.¹⁰ Such conflicting data point to the danger of making gross generalizations about the effects of the media. Children from different cultures may bring different experiences and abilities to the media, use them for different purposes, react to them in different ways, and take different things from them.

Most of the time given to the media, then, comes from those periods when no structured activities are scheduled. The casual play hours, the long afternoons when "there is nothing to do," provide the media with their audiences. This is not to say that some children are not addicted to one or the other of the media to the point that they will give up anything for the opportunity to view or read. However, such addiction is usually a sign of a disturbed child, and media use is a *symptom* of the disturbance, not a cause. Rarely will a normal child pass up the opportunity to interact with friends or engage in some organized play in favor of one of the media.

Emotional responses to the media. Children have the capacity to give themselves over completely to the world created by the pictorial media. Such intense involvement often leads to strong emotional responses. One facet of the Payne Fund studies of the 1930's (a series of investigations of the effects of movies on youth) concerned children's emotional responses to

⁹ Eleanor E. Maccoby, "Television: Its Impact on School Children." *Public Opinion Quarterly* 15 (1951): 421-44; Himmelweit et al., *Television and the Child*; Schramm et al., *Television in the Lives of Our Children*.

¹⁰ T. Furu, *Television and Children's Life: A Before-After Study* (Tokyo: Japan Broadcasting Corporation, 1962).

movies. Physiological measures, such as heart and breathing rates and galvanic skin response, charted as children viewed movies, revealed that changes in emotion correspond to action on the screen and that different children respond differently. For example, girls respond most strongly during romantic scenes, boys during fight scenes.¹¹

Media content may also frighten children. The threat of harm to a character with whom they identify closely, particularly when the threat is of an unusual nature, will often upset the young child. Ritual violence, such as the western gunfight, is accepted as a convention and seldom evokes fright, but such an incident as a knife at an attractive character's throat is more direct and less conventional and may arouse fear. Content which reminds children of their own, often unexpressed fears—fears of darkness and loneliness, for example—frightens them. Fear of the unknown is a powerful emotion, and if it is aroused in them, children respond strongly.¹²

Age and experience affect the kind and degree of emotional response a child makes to the media. The young child, who has not yet developed the "adult discount" which enables him to distinguish clearly between reality and fantasy, is more likely to be frightened by stressful scenes. He does not yet know that "things will come out all right." Similarly, the girl who is not old enough to understand her romantic role will probably not respond emotionally to a love scene.

But most children, no matter what their age or interests, find some media content which will arouse some emotion. The important and complex question, and one for which there is no pat answer, is if, when, and how emotional arousal may become too much.

Learning from the media. There is little doubt that under the right conditions children in the classroom can learn effi-

¹¹ W. S. Dysinger and C. A. Ruckmick, *The Emotional Responses of Children to the Motion Picture Situation* (New York: Macmillan, 1933); W. W. Charters, *Motion Pictures and Youth: A Summary* (New York: Macmillan, 1933).

¹² See Himmelweit et al., *Television and the Child*; Schramm et al., *Television in the Lives of Our Children*.

ciently from the pictorial media. Chu and Schramm write that the success of instructional television depends on "simplicity of presentation, clear organization of material, motivation of the learners, knowledge of results, practice—things that are by no means unique to television."¹³ To the extent that program content meets the standards of good pedagogical organization, and to the extent that it is presented in a "learning context," televised instruction is successful.

To say, however, that children can learn effectively from television or film is not to say that they will learn. In 421 comparisons made in a study analyzing the relative effectiveness of instructional television and conventional teaching, the conventional teaching was more effective in 12 percent of the cases and television in 15 percent; however, in 73 percent there was no significant difference. Moreover, of the studies in which all the variables were strictly controlled so that the same material was presented by the same teacher to randomly assigned children, either by television or face-to-face, there was no significant difference in learning effect produced by either medium.¹⁴

Most programs to which children expose themselves, however, and the conditions under which exposure occurs do not conform to optimal learning criteria. The mass media are concerned with informing and entertaining, not with highlighting cues, motivating learners, or providing opportunity for practice. Nevertheless, although the mass media do not program to teach and the mass audience does not expect to be taught, incidental learning does occur.

Incidental learning. The acquisition of certain items of information without their being deliberately sought out is termed incidental learning. The child who picks up new facts while listening to a quiz show or new attitudes while viewing television has engaged in such learning. Early investigations of children's learning from movies revealed that a child of eight

¹³ Godwin C. Chu and Wilbur Schramm, *Learning from Television: What the Research Says* (Washington: National Association of Educational Broadcasters, 1967), p. 60.

¹⁴ *Ibid.*

could remember three facts to every five an attentive adult could recall; by midteens he could remember nine out of ten.¹⁵ Recent studies indicate that children in the later grade-school years are even more likely than adults to remember material incidental to main story content—details about the furnishing of a room or the dress of a minor character, for example.¹⁶

There is a significant relationship between the interactions of the various media and the skills a child develops as he matures. In one of the few comparisons of this kind, television appears to have sent those children in the highest and lowest intelligence groups to school with about a one-year advantage in vocabulary over children from a town without television. The study indicated, however, that by the sixth grade this advantage was neutralized, both incidental and formal learning from the other media working to cancel out the difference.¹⁷

What may be learned from the pictorial media is often very significant. Fantasy content contains a great deal of information which may be important to the child. Dramas, mysteries, and situation comedies include information about customs, norms, attitudes, and role behavior. This material about what to expect from the social world are facts which children need to—and do—learn. For example, Siegel exposed two groups of third-graders to one of two radio shows, each characterizing taxi drivers differently, and found that each group developed different expectations of what taxi drivers were like. Peterson and Thurston found that a single exposure to the film *The Birth of a Nation* led to unfavorable attitude changes toward black people among children which, in some cases, persisted as long as nineteen months after the film was viewed.¹⁸

Bandura and his associates demonstrated that children learn

¹⁵ P. W. Holaday and G. D. Stoddard, *Getting Ideas from the Movies* (New York: Macmillan, 1933).

¹⁶ G. A. Hale, L. K. Miller, and H. W. Stevenson, "Incidental Learning of Film Content: A Developmental Study," *Child Development* 39 (1968): 69-77.

¹⁷ Schramm et al., *Television in the Lives of Our Children*.

¹⁸ Alberta Siegel, "The Influence of Violence in the Mass Media upon Children's Role Expectations," *Child Development* 29 (1958): 35-56; Ruth C. Peterson and L. L. Thurston, *Motion Pictures and the Social Attitudes of Children* (New York: Macmillan, 1933).

behavior through observation and imitation of models and that these models may come from the pictorial media as well as from real life.¹⁹ A number of factors influence learning of this kind. Children remember content relevant to situations in which they might someday find themselves. Preadolescent children, for example, tend to recall content pertaining to such things as how to act on a date, what to expect at college, how to behave in or toward different occupational roles. Boys are more likely to identify with and recall the actions of male figures, while girls attend to and remember female behavior. Children tend to remember material that is novel, actions that are rewarded, and behavior that appears to be effective. They recall scenes of high action, emotion, and conflict; they remember scenes that resemble familiar surroundings or circumstances. In other words, they learn more if the content seems real to them.

Of course, what is new or familiar or useful or real to one child may not be so to another. The sex of the viewer influences what is considered useful. Age, too, is an important consideration. The young child's distinction between reality and fantasy is rather fuzzy, and there is a great deal more that is novel to him than to the teenager. What is seen as reward by the lower-class child might not be so to his middle-class counterpart. In short, we return to our recurrent theme that different ages, different interests, and different capabilities will lead to different kinds and amounts of learning from the media.

Effects on aggressive behavior. Much of the research on observational learning from the media has focused on children's responses to the portrayal of violence.²⁰ Berkowitz states that violence in television or film may affect aggressive behavior in three ways: by teaching techniques of aggressive behavior, by

¹⁹ See A. Bandura and R. H. Walters, *Social Learning and Personality Development* (New York: Holt, 1963); also see A. Bandura, "Vicarious Processes: A Case of No-Trial Learning," in L. Berkowitz, ed., *Advances in Experimental Social Psychology*, vol. 2 (New York: Academic Press, 1965) pp. 1-55.

²⁰ See Bandura and Walters, *Social Learning and Personality Development*; Bandura, "Vicarious Processes"; L. Berkowitz, *Aggression: A Social-Psychological Model* (New York: McGraw-Hill, 1962); L. Berkowitz, "Violence in the Mass Media," in *Paris-Stanford Studies in Communication* (Paris and Stanford: Institut Français de Presse, University of Paris, and Institute for Communication Research, Stanford University, 1962), pp. 107-37.

arousing previously learned aggressive habits, and by providing moral justification for hostile wishes.²¹

Research has demonstrated not only that children learn new behavior from the media but that aggressive behavior has a high probability of being learned. This is apparently true because the portrayal of aggression fulfills many of the conditions which promote incidental learning. For example, media violence occurs in contexts of emotion, action, and conflict and often involves figures with whom children identify; when the hero triumphs through aggression, the aggression is implicitly portrayed as effective because it is rewarded.²²

But learning new aggressive techniques is different from applying that learning to a life situation. The important question concerning aggressive behavior is whether the media influence the performance of aggressive acts. Disregarding for the moment the arousal of hostile motives, the child might be prompted to perform aggressive acts learned from the media if he finds himself in a life situation similar to the one observed in the media, particularly if that act is remembered as having been effective or rewarded and if social sanctions against the act are not clearly apparent at the moment. Moreover, it is likely that the high frequency of exposure to violence on television may, under certain circumstances, desensitize a child to the undesirable effects of violence in real life. In either case, hostility need not be a motive, although obviously such aggressive acts may be just as destructive as those motivated by anger.

Hostile motives are, however, relevant to what is learned. There is evidence to suggest that those children who are most hostile toward the world tend to be heaviest viewers of media violence.²³ William H. Haines interviewed 100 teenage prisoners in a Chicago jail and concluded that television, radio, movies,

²¹ Berkowitz, "Violence in the Mass Media."

²² See Berkowitz, *Aggression: A Social-Psychological Model*; Berkowitz, "Violence in the Mass Media"; Bandura and Walters, *Social Learning and Personality Development*.

²³ Schramm et al., *Television in the Lives of Our Children*; Bailyn, "Mass Media and Children."

and pornographic literature play a definite role in the creation of antisocial behavior "in susceptible teenagers"—young people with pent-up frustrations and hostility.²⁴

In the same vein, children who have been experimentally angered before viewing violence in a film, who are told that the aggression in the film is morally justified (the hero triumphs and the villain receives his just deserts), or both express more aggressive feelings than do viewers who see the same film but are not angered or told the aggression is justified. It is as if viewing the forcible defeat of a villain in a film justifies one's aggressive acts against the villains in one's own life.²⁵ Hence the tendency of the film and television industries to accept, if not glorify, the shibboleth that force in the cause of right is justified may well increase the probability that some child will engage in aggression.

Finally, there is the possibility that the mere viewing of aggression will arouse aggressive impulses and habits. This possibility, if course, assumes that the aggressive impulses and habits existed before the child turned to the screen. While the evidence on this question is scarce, a number of experiments on observational learning have found that children not only perform the novel aggressive acts portrayed in the film but that their level of aggressive behavior not portrayed in the film increases also.²⁶ For some children, then, media-portrayed vio-

²⁴ W. H. Haines, "Juvenile Delinquency and Television," *Journal of Social Therapy* 2 (1955): 192-98.

²⁵ R. S. Albert, "The Role of the Mass Media and the Effect of Aggressive Film Content upon Children's Aggressive Responses and Identification Choices," *Genetic Psychology Monographs* 55 (1957): 221-85; L. Berkowitz and Edna Rawlings, "Effects of Film Violence on Inhibitions against Subsequent Aggression," *Journal of Abnormal and Social Psychology* 66 (1963): 405-12; D. P. Hartman, *The Influence of Symbolically Modeled Instrumental Aggressive and Pain Cues on the Disinhibition of Aggressive Behavior* (unpublished Ph.D. dissertation, Stanford University, 1965).

²⁶ A. Bandura, Dorothea Ross, and Sheila Ross, "Transmission of Aggression through Imitation of Aggressive Models," *Journal of Abnormal and Social Psychology* 63 (1961): 572-82; A. Bandura, Dorothea Ross, and Sheila Ross, "Imitation of Film-Mediated Aggressive Models," *Journal of Abnormal and Social Psychology* 66 (1963): 3-11; P. H. Mussen and E. Rutherford, "Effects of Aggressive Cartoons on Children's Aggressive Play," *Journal of Abnormal and Social*

lence may simply lower the inhibitions against antisocial behavior in real life.

It is probable that arousal of aggression, if it occurs, will lead to aggressive acts among only a few children. It is generally the disturbed child or the child who may have difficulty distinguishing between reality and fantasy or the child who is excessively hostile toward his social environment who is most likely to engage in aggressive behavior. Character traits do not, of course, derive from the media, but from the child's training, family life, personality, and social experiences. It is unfortunate that these maladjusted children are the ones most likely to expose themselves to the pictorial media and to programs that contain violence. Berkowitz writes, "While it may be that television, movies, and comic books will excite antisocial conduct from only a relatively small number of people, we can also say the heavy dosage of violence in the media heightens the probability that someone in the audience will behave aggressively in a later situation."²⁷

Conclusion. From the foregoing analysis it should be clear that children are affected by the mass media, just as they are affected in some way by other events in their lives. They give time and attention to the media; they respond emotionally to the media; they learn from the media. But they are not, by any stretch of the imagination, sponges indiscriminately soaking up anything and everything they see or hear. Nor are they all affected by the same things or in the same way. While under certain conditions the child may be a vulnerable target, under other conditions he may prove a most obstinate audience. The relationship between children and the mass media is perhaps best summed up in the words of Wilbur Schramm:

As between two favorite images of the situation—the image of children as helpless victims to be attacked by television, and the image of television as a great and shiny cafeteria from

Psychology 62 (1961): 461-64; O. J. Lovaas, "Effect of Exposure to Symbolic Aggression on Aggressive Behavior," *Child Development* 32 (1961): 37-44.

²⁷ Berkowitz, "Violence in the Mass Media," p. 134.

which children select what they want at the moment—the latter is the more nearly accurate . . . the very nature of television makes for a minimum of variety in the cafeteria; the nature of human beings makes for great variety on the side of the children.²⁸

²⁸ Schramm et al., *Television in the Lives of Our Children*, pp. 1–2.

ALBERTA E. SIEGEL

*The Effects of Media Violence
on Social Learning*

"Every generation is only twenty years away from barbarism," writes Siegel. "Twenty years is all we have to accomplish this task of civilizing the infants who are born into our midst each year." What do they learn in those twenty years from the media on which they spend so much time, which speak to a child's best developed senses "conveying a reality which is not very different from the other realities he experiences," and which are stuffed with violent events (a murder or killing every thirty-one minutes, says Siegel, quoting the *Christian Science Monitor*, during the early evening hours when sixteen million children are watching television). The preceding paper was a general summary. This article better represents the concerns of some researchers who study the problems of children and the effects of television upon them. This is an excerpt of a paper which was published in *Violence and the Media*, edited by R. K. Baker and Sandra Ball (U.S. Government Printing Office, 1969), and issued as a report to the National Commission on the Causes and Prevention of Violence. It is reprinted here by permission of the author, who is a professor of psychology in the department of psychiatry at Stanford.

WHEN MOVIES and TV are used to report and inform, their inherent authenticity works to impress the news on the viewer in a forceful and compelling way. Most observers of the contemporary American social scene are struck by the significant effect television news-reporting has on the public's involvement in political issues, understanding of current affairs, and preferences among public figures. Through television coverage of a national catastrophe and its aftermath, the tragic assassination of our President in 1963, a single mood of shared grief and mourning was sustained throughout the entire country.

A newspaper reporter made a typical comment on the impact of television news reporting in his account of the 1968

presidential election contest in rural Iowa. He noted that the farmers whom he interviewed seemed less preoccupied with political issues immediately affecting their livelihood and their communities than with those they had learned about through television and the other mass media: "Other issues have become so overriding as to obscure the farmer's problems, even in his own mind. Through some miracle of modern communication and repetition, the farmer lives in rural solitude and dwells upon crime-filled city streets, fiery demonstrations, bloody riots, bearded campus protestors, the frustrating war in Vietnam. And all indications are that those are the images that will fill the farmer's mind when he walks into the voting booth November 5." ¹

Today, the commonplace observation that television news reporting influences people's concepts of reality and thus their behavior is being supplemented by the feeling that dramatic shows may have the same effect. The same television set that brings news into the living room is also bringing realistic dramatic presentations. Russell Baker, commenting on the nation's response to the assassination of Senator Robert F. Kennedy, noted the mixed emotions evoked by the fact that information about this event came to the viewer on the same set that purveys entertainment and sports: "Gradually, grouped together around the social center of the TV screen with its humdrum evocation of the shared boredom of idle evenings and endless Sunday afternoons, we struggle to suppress the horror." ²

Perhaps the fact that news and entertainment appear through the same medium is helping to blur the distinction between fact and fantasy. This was suggested by Clive Barnes when he remarked that the author of a Broadway play is "against the moral blindness that permits millions of people to treat [the war in Vietnam] as a kind of spectator sport to be watched on TV until we are no longer completely sure whether we are seeing our sons and brothers being killed on a

¹ Douglas E. Kneeland, "Pocketbook Issues Secondary in Rural Iowa," *New York Times*, October 18, 1968, p. 34.

² Russell Baker, "Nightmare out of the Attic," *New York Times*, June 6, 1968.

newsreel or a few Hollywood actors biting the dust on the Late Late Show." ³

We must consider the possibility that the inherent authenticity which characterizes television lends credibility to fictional presentations. George Willey has raised his own doubts about the distinction between reality and the producers' make-believe: "The growing concern is that what they make, many believe." ⁴ He argues that the problem with violence in the mass media is not that it is emotionally upsetting or aesthetically displeasing, but that it is accepted as a representation of the way things really are. In one column, he reviewed the difficulty which producers have encountered in attempting to edit violence from programs already in production. His example is a producer who cut out some of the gorier aspects of a violent scene—a lady sniper fires a rifle at a young man driving through Black Rock Town—"What will not be seen . . . is a part of the same sequence which had been filmed in the original version: a close-up shot of the windshield shattering and the young man, face bleeding, collapsing over the steering wheel. This of course, is missing the point altogether. The objection to violence is not directed so much to the effect of violence but to the constant use of violence and the implicit suggestion that it should be anticipated wherever one goes." ⁵

This account shows one response to the assassination of Senator Kennedy, an effort by the television and advertising industries to cut down on the amount of violence beamed over the airways. Other comments on that effort also touched on the blurred distinction between reality and fantasy. For example, a newspaper column related that the Association of National Advertisers was urging its members to select television scripts that avoid excessive or unnecessary violence. The column concluded by stating: "Yesterday an agency media guy made a valid point

³ Clive Barnes, "Heller's 'We Bombed in New Haven' Opens," *New York Times*, October 18, 1968, p. 36.

⁴ George Willey, "Does Happy Ending Justify Violence?" *Palo Alto (Calif.) Times*, June 10, 1968, p. 22.

⁵ George Willey, "Editing out Violence Poses Problems," *Palo Alto (Calif.) Times*, October 8, 1968, p. 16.

about television violence. "What do you do about the news programs?" he asked."⁶

The same intuition was the basis for a column that appeared after the Democratic convention in Chicago in August, 1968.

Has the campaign against violence in TV programs, which started after the killing of Dr. Martin Luther King, Jr., and Senator Robert F. Kennedy, suffered a setback as a result of the riots attending the Democratic national convention?

All three networks have been seriously examining ways of diminishing violence in dramatic entertainment and in children's cartoons partly as a result of the widespread belief that television's example can influence the impressionable for good or evil. But the way network spokesmen look at it at the moment there isn't much point in cutting out the shooting in a western or the pistol-whipping in an underworld drama if the viewer can switch to a news program and see citizens and the police locked in a bloody real-life no-holds-barred conflict. No network would have dared stage in make-believe anything as violent as the battle in Chicago.⁷

The argument imputed to the network spokesmen makes sense only if one lumps together both fiction and news presentations in evaluating their effects on behavior.

No doubt the cues as to a communication's authenticity are important. A television presentation identified on the screen as "news," and discussed by someone called a "newsman," provides internal cues that its picture of mayhem and destruction are to be understood differently from similar photographs identified as "drama."

The comfortable and well-understood old distinction between truth and fiction is blurred by a medium that presents truth and drama alternately, in the same frame, with the same sharp fidelity, and with the vividness that only a medium appealing to eye and ear simultaneously can invoke.

⁶ Philip H. Dougherty, "Putting a Damper on Violence," *New York Times*, July 12, 1968, p. 38.

⁷ R. Musel, "Chicago Violence on TV Outstrips Make-Believe Programs," *Palo Alto (Calif.) Times*, August 30, 1968, p. 12.

Media Content and Social Learning

Is social behavior affected by the media? Do children who have grown up on a steady diet of television behave differently than they would if it did not exist?

These questions lie at the heart of our current concern about the media and violence. Serious and disinterested observers differ as to how to frame the best answer on the basis of our present knowledge. Observers with a stake in the media capitalize on our ignorance to reassure one another that the status quo will hold.

Behavior is guided by belief. People act in a context of convictions about the meaning of their acts, what acts are appropriate in particular settings, and what responses may be expected from others. Action emerges from beliefs about the world and how one should respond to it.

Human social behavior is learned. Much of this process occurs through trial and error, especially in the earliest years of life. It does not seem likely that television and other noninteractive media play a great role in such learning, since they cannot provide differentiated "feedback" to an individual. Whether an infant is crying or quiet, awake or asleep, hungry or full, walking or sitting, behaving well or mischievously, the television drones on and on, uninfluenced by the infant's behavior. Such an unresponsive communications system does not enter into trial-and-error learning.

A great deal of human social behavior is also learned through observation and imitation. As the years pass, children acquire the ability to model their behavior after certain others, and this ability seems to be independent of rewards and punishments. To explain a child's behavior, we inquire about the observational learning opportunities which have been available to him—"Where in the world did he learn to do *that*?" We know that children watch television. Do they also imitate what they observe there? The inherent authenticity of television and movies makes it easy to believe that they do. Children understand such presentations as authentic and credible, and assume

that the world is really the way it appears there. It is natural for them to take the behavior they observe on television as a model for their own. An amusing illustration of this comes from Britain:

Presenting a resolution urging the Government to consider a code of conduct to guide people responsible for selecting television programs, Fred Armstrong [a member of the Rural District Councils Association, speaking at its annual conference] said that during one half-hour program the word "bloody" had been used 30 to 40 times.

Was it surprising, he asked, when a 6-year-old boy told a woman in a shop she was a "bloody silly old moo" because his favorite candy was sold out?⁸

Although Americans might differ with this Briton as to the seriousness of the behavior he described, most would agree with him that the child's use of the proscribed word "bloody" probably resulted from his watching shows in which it was used by characters he subsequently imitated. At the other extreme is another account of imitative behavior in Britain, this time about a twelve-year-old boy who was found dead at his home in Leicester, in the English Midlands:

Television chiefs issued a warning to millions of youngsters today after an inquest on a boy who died while imitating his masked and cloaked hero, "Batman" . . . His father . . . told the inquest yesterday he thought his son, hanged while wearing a homemade Batman-style outfit, had been leaping from a cabinet in the garden shed when his neck caught in a nylon loop hanging from the roof. The inquest verdict was misadventure.

After the inquest [the father] said that he hoped the Batman show would be taken off British television. "It is far too dramatic and hair-raising," he said. "It encourages children to attempt the impossible." A television company spokesman said:

"We regret that the death of Charles Lee should be attributed to his viewing of Batman. Young viewers are cautioned that they should make no attempt to imitate Batman's activities.

⁸"Children in Britain, Thirteen to Fourteen, called Rulers of the TV Set," *New York Times*, July 17, 1967, p. 12.

"Before each episode young viewers are reminded that Batman does not in fact fly and that all of his exploits are accomplished by means of his secret equipment."⁹

What are we to think of this event? In what sense is television "responsible" for this child's violent death? Is this twelve-year-old's imitative behavior in the same category as the six-year-old's remarks about "a bloody silly old moo"?

Adult behavior, as well as children's, may be imitative. On December 13, 1966, the National Broadcasting Company presented a filmed drama entitled "The Domsday Flight." "The plot of the film centered on the placement of a bomb on a transcontinental airliner. . . . The plane emerged safely because it landed at an altitude above that at which the bomb was triggered to go off. The supposed suspense lay in tracing the deranged man who kept teasing officials with information on his deadly act."¹⁰

While the film was still on the air, a bomb threat (which turned out to be a hoax) was telephoned to one U.S. airline. Within twenty-four hours of the show, four more had been phoned in. Within the week following the show, eight such hoax calls in all were received by various U.S. airlines, including American, TWA, Eastern, Pan-American, and Northwest.¹¹ These eight bomb threats in one week equaled the number of such calls that had been received in the entire previous month, according to the Federal Aviation Agency.¹²

Before the film was shown, the Air Lines Pilots Association had urged NBC to keep the program off the air in the interest of air safety. They advised NBC that experience had shown that "the mentally unstable are highly responsive to, and easily provoked by, suggestion."¹³ The pilots indicated that they feared the program could cause an irrational person to commit

⁹ "Young Britons Told Not to Copy Batman," *New York Times*, August 25, 1966, p. 42.

¹⁰ Jack Gould, "The Domsday Flight," *New York Times*, December 15, 1966.

¹¹ Jack Gould, "A Bomb Backfires," *New York Times*, December 16, 1966.

¹² "TV Show Blamed by FAA for Rise in Bomb Hoax Calls," *New York Times*, December 21, 1966, p. 69.

¹³ "Air Bomb Threats Follow TV Drama," *New York Times*, December 15, 1966, pp. 35-56.

an act of sabotage. Telegrams were sent by the president of the pilots' association to the author of the script, to an NBC vice-president, to the west coast publicity director for NBC, and to the producer of the film at a Hollywood studio.¹⁴ When no response was received, another representative of the pilots' association telephoned another NBC vice-president in a further attempt to convince the network to call off the program.

These efforts proved unsuccessful. The film was shown and the feared rash of bomb hoaxes did ensue. Fortunately, there is no record that a bomb was in fact placed on any plane. Unfortunately, we have no information on the identities of the individuals who translated screen behavior into acts in their own lives. We do not know their ages, their social histories, nor whether they were "disturbed," "unstable," or "impulsive." Probably some of them were. Many such individuals do exist in our society, and in our concern for the effects of television, we must consider them as well as the "balanced," "stable," and "restrained" persons for whom such a ready translation from drama to reality may be unthinkable.

For many years, black citizens have objected to the stereotyped representations of Negroes in the mass media. They have resented the fact that blacks were almost always portrayed in subordinate and menial roles, such as servants, shoeshine boys, fieldhands, and ne'er-do-wells. They have felt that these condescending and two-dimensional portrayals would influence the way Americans felt about black people, even the way black Americans would feel about themselves. This argument rests on the assumption that people "accept" and "believe" the fictional representations in the media. The depth of the objections of black citizens lends seriousness to this assumption. It has not been sufficient to reply, "But it's only a story" or, "That's only fantasy." Even the media men themselves have finally accepted the validity of this argument, and serious efforts are now being made to portray blacks in dignified and admirable roles, to represent in the media the true variety of the human condition among black as well as white Americans. They have taken seriously the notion that for some Americans

¹⁴ *Ibid.*

the media constitute their only acquaintance with blacks, and that therefore it is important for the media portrayals to be fair and realistic. Should we take seriously the notion that for some Americans the media constitute their principal acquaintance with violence and aggression, and that they learn about these phenomena and how to deal with them solely through the media?

Several research studies have addressed this question. One examined the influence of violence in the mass media upon children's role expectations.¹⁵ An effort was made to study young children's impressions of a taxi driver—a role chosen because taxi drivers are not widely stereotyped in our society. One group of second-graders heard a series of radio dramas about taxi drivers. In each "thrilling episode," the taxi driver got into trouble with another person and extricated himself by being violently aggressive against the other person. A second group of children in the same grade heard a series which differed from the other only in the endings. In this series, the endings were not violent—instead, the taxi driver found a constructive way to resolve the problem.

To determine whether the children's reality conceptions had been influenced by these fictional presentations, the researcher gave each child a newspaper test. The child was shown a copy of the local newspaper and was asked to explain what a newspaper is. Only those who understood that a newspaper reports reality were in the final analysis. The individual who showed the newspaper to the child had not been involved in the earlier playing of the dramas on radio, nor did she acknowledge any acquaintance with them. She asked the child to tell her how certain newspaper stories ended. The first stories presented to the child concerned current local news—the current weather, the fact that Lincoln's birthday was approaching and that it would be a school holiday. Then the child was read stories about local taxi drivers, and asked to finish the story. One of these stories related an episode very similar to one the children had heard enacted on the radio. The children who had heard

¹⁵ Alberta E. Siegel, "The Influence of Violence in the Mass Media upon Children's Role Expectations," *Child Development* 29 (1958): 35-56.

the violent endings to the radio drama gave very different responses to this newspaper story than did those who had heard the nonviolent series. The responses were categorized according to whether the child attributed high, intermediate, or low aggression to the taxi driver in completing the newspaper account. In this Pennsylvania community, taxi drivers are helpful and friendly, so it is not surprising that the children who had heard the nonviolent radio dramas tended to finish the news story in a way that attributed no aggression (two-thirds of the cases) or only intermediate aggression (in the other one-third) to the taxi driver. The children who had heard the violent series, on the other hand, apparently thought that taxi drivers in their own town would behave the same way as the fictional ones, for half of them finished the news account in a way that attributed "high" aggression to the local taxi driver, and only one-third attributed no aggression.

This small study would need to be duplicated with various children, roles, and media before we could generalize from its findings. In the meantime, it warns us that the distinction between reality and fantasy may be blurred for normal young children.

A striking series of studies by Albert Bandura and his colleagues at Stanford University has demonstrated that children learn aggressive behavior from television and that they enact this behavior in their play under suitable circumstances. In earlier studies, Bandura had already shown that children will imitate the specifics of aggressive behavior they observe in an adult.¹⁶ He and his colleagues then conducted a study to determine whether children will imitate aggression they observe in a film as readily as they will imitate aggression they observe performed by adults.¹⁷

¹⁶ A. Bandura and Althea C. Huston, "Identification as a Process of Incidental Learning," *Journal of Abnormal and Social Psychology* 63 (1961): 311-18; A. Bandura, Dorothea Ross, and Sheila A. Ross, "Transmission of Aggression through Imitation of Aggressive Models," *Journal of Abnormal and Social Psychology* 63 (1961): 575-82.

¹⁷ A. Bandura, Dorothea Ross, and Sheila A. Ross, "Imitation of Film-Mediated Aggressive Models," *Journal of Abnormal and Social Psychology* 66 (1963): 3-11.

The study included ninety-six nursery-school children, ranging in age from less than three to nearly six, with an average age of four and one-half. He assigned the children arbitrarily to four categories. A child in the first category, the "Real-Life Aggressive" condition, was brought to a room and given some materials to play with at a small table. After the child settled down to play, an adult in another part of the room began playing with several toys, including a mallet and a five-foot inflated plastic Bobo doll. The adult was aggressive toward the Bobo doll in highly novel and distinctive ways, and performed each of these aggressive acts—like pummeling the Bobo on its head with a mallet—several times in the course of the session. The child, of course, observed this aggressive adult behavior occurring in his presence. A child in the second category was brought to the same playroom, set to playing with the same toys, and then shown a color film on which the same adult model displayed the same sequence of novel aggressive behaviors to a Bobo doll. This was called the "Human Film-Aggression condition." A child in the third category was shown a cartoon film showing an adult costumed as a cat, playing against a fantasyland backdrop of brightly colored trees, butterflies, etc. On this film, the cat was similarly aggressive towards the Bobo doll. Finally, children in the fourth category were reserved as a comparison group, with no exposure to aggressive models in the course of the study.

Immediately after the experience described above, the child was taken to an anteroom containing a variety of highly attractive toys. The experimenter told him he might play with them, but once he had begun, the experimenter purposely frustrated the child by saying she had decided to reserve the toys for some other children. She indicated that instead he could play with some toys in another room. They went to that room, where the adult busied herself with paperwork at a desk, while the child played with the toys. These included toys typically used in aggressive play and others associated with unaggressive activities. Among them was a Bobo doll and a mallet. The child played for twenty minutes, while his behavior was observed and scored

by judges watching through a one-way mirror from an adjoining room.

The main finding of this study was that children who had observed adult aggression prior to being frustrated were more aggressive in their subsequent play than those who had been frustrated, but had not observed any adult aggression. The average total aggression score for the control children was 54, while the average was 83 for children in the "Real-Life Aggressive" category, 92 for those in the "Human Film-Aggressive" category, and 99 for those in the "Cartoon Film-Aggressive" category.

The second finding was that the aggression of the children who had observed adult models would be imitative. The child's behavior during the play session was rated as imitative, partially imitative, or nonimitative. An imitative act was one which directly copied the adult behavior the child had seen earlier, with the child exhibiting the very acts he had observed or speaking the very words the adult had spoken. In the "Real-Life" and "Human Film" categories, 88 percent of the children exhibited varying degrees of imitative aggression, and in the "Cartoon Film" condition, 79 percent did so. Not only were these children more aggressive as a whole, but, more significantly, the character of their aggressive behavior was closely modeled on the behavior they had observed in adults, whether live or on film. Scores for imitative aggression were significantly higher for the children who had observed models than for the control children, and the same was true for scores of partially imitative aggression. On the other hand, aggressive gunplay was displayed equally by the various groups. This is an example of aggressive behavior which had not been modeled by the adults in the experiment.

This study holds special interest not only because it demonstrates that children mimic the aggressive behavior of adults, whether they observe this behavior in the flesh or on film, but also because it demonstrates that the kind of film seen does not seem to affect the mimicking process significantly. The fantasy-reality distinction in which adults believe seems to have little

significance for the bright middle-class preschool children Bandura and his colleagues studied.

One reason that Bandura's work is so widely respected by other psychologists is that his conclusions do not rest on a single study. He has conducted a series of investigations over the years, using different children and different films. Each study adds to the strength of the conclusions we can draw.

A second study meriting close consideration here used nursery-school children whose ages ranged from three to five years, with an average of just over four years.¹⁸ They were assigned at random to different categories. A child in the first category was taken to a playroom where the adult experimenter worked at a desk while the child watched a five-minute film projected on a TV console. This film concerns two adult men, Rocky and Johnny. At the beginning, Johnny is playing with his highly attractive collection of toys. Rocky asks to play with some, and Johnny refuses. Rocky then behaves aggressively toward Johnny and his possessions, enacting a series of highly unusual and distinctive aggressive behaviors while making hostile remarks. (These unusual and distinctive acts of aggression were employed in this series of studies to enable observers to distinguish imitative acts of aggression in the child's subsequent play from other stereotyped acts common to the play of many children.) Rocky is the victor as the result of his aggressive behavior, and "the final scene shows Johnny seated dejectedly in the corner while Rocky is playing with the toys, serving himself generous helpings of 7-Up and cookies, and riding a large bouncing hobby horse with gusto. As the scene closes, Rocky packs the playthings in a sack and sings a merry tune."¹⁹ A commentator announces that Rocky is the victor.

Another film was used which also involved aggression between Rocky and Johnny, but was rearranged in sequence so that the aggressive behavior shown by Rocky results in his being severely punished. "Rocky is thoroughly thrashed by

¹⁸ A. Bandura, Dorothea Ross, and Sheila A. Ross, "Vicarious Reinforcement and Imitative Learning," *Journal of Abnormal and Social Psychology* 67 (1963): 601-7.

¹⁹ *Ibid.*, p. 602.

Johnny. As soon as he succeeds in freeing himself, Rocky flees to a corner of the room where he sits cowering, while Johnny places his toys in the sack and walks away. The announcer comments on Rocky's punishment."²⁰

After viewing one of these films, the child was taken to a room for a twenty-minute play session which was observed and scored by judges behind a one-way vision screen. This room contained some toys similar to those in the film, and others as well—the latter being present to avoid loading the dice. The child's imitative aggressive acts and his nonimitative aggressive acts were recorded.

The total aggressive scores of the children in the "Aggressive Model-Rewarded" category were 75.2, which is significantly higher than the total for children in the "Aggressive Model-Punished" category (53.5). In contrast, children who had seen neither film but who simply were brought to the playroom for a twenty-minute play session had total aggression scores that were intermediate (61.8). Most of the aggression was not sufficiently close to that exhibited by Rocky and Johnny to be called imitative, but the imitative aggression that was observed occurred more commonly among the Model-Rewarded children than among the Model-Punished children, and both showed more imitative aggression than the controls, who had never observed the distinctive adult behaviors.

After the play session was over, a child was asked to evaluate the behavior exhibited by Rocky and Johnny, and to select the character he preferred to emulate. Among the children who had seen Rocky emerge the victor because of his aggressiveness, 60 percent preferred him, 5 percent preferred Johnny, and 35 percent voiced no preference. Among those who had seen Johnny triumph despite Rocky's aggressiveness, 20 percent preferred Johnny, 20 percent preferred Rocky, and 60 percent had no preference.

Almost without exception the children who said they preferred Rocky as a model were nonetheless critical of his behavior. They preferred him despite his infamy, siding with the winner: "'Rocky is harsh, I be harsh like he was,' 'Rough and

²⁰ *Ibid.*

bossy,' 'Mean,' . . . 'Rocky beat Johnny and chase him and get all the good toys.' 'He come and snatched Johnny's toys. Get a lot of toys' . . . 'He was a fighter. He got all good toys.'"²¹ Bandura's comment on the meaning of this finding deserves to be quoted:

The finding that successful villainy may outweigh the viewers' value systems has important implications for the possible impact of televised stimulation on children's attitudes and social behavior. The present experiment involves only a single episode of aggression that was rewarded or punished. In most televised programs the "bad guy" gains control over important resources and amasses considerable social and material rewards through a series of aggressive maneuvers, whereas his punishment is generally delayed until just before the last commercial. Thus children have opportunities to observe many episodes in which antisocially aggressive behavior has paid off abundantly and, considering that immediate rewards are much more influential than delayed punishment in regulating behavior, the terminal punishment of the villain may have a relatively weak inhibitory effect on the viewer.²²

These two studies demonstrate that young children imitate the specific acts of aggression they have observed in the behavior of adults on film or television. This imitation occurs whether the dramatic presentation is realistic or fantasylike. Imitation is enhanced if the aggression brings rewards to the adult who is observed and minimized if the aggression brings punishment.

A third, more recent study by Bandura again confirms the finding on imitation. However, it is somewhat more ominous in its implications, for it shows that children acquire from watching television the capability of performing imitatively many more acts of aggression than they spontaneously exhibit—that children learn more from television than their spontaneous behavior reveals.

The sixty-six children who participated in this third study were again of nursery-school age, averaging just over four years

²¹ *Ibid.*, p. 605.

²² *Ibid.*, pp. 605–6.

of age.²³ They were assigned at random to three categories: "Model Rewarded," "Model Punished," and "No Consequences." A child in the first category began his participation by watching a five-minute television show in which an adult exhibited physical and verbal aggression toward a Bobo doll. In the closing scene of the "Model Rewarded" film, a second adult appeared, bearing an abundant supply of candies and soft drinks, informed the model that he was a "strong champion," and that his superb performance of aggression clearly deserved a treat. He then gave the model various desirable foods, and while the model consumed these he continued to describe and praise the model's feats.

A child in the "Model Punished" category saw a performance which was identical to the above in its initial sequences, but concluded with a second adult's reproof rather than praising the model: "'Hey there, you big bully. You quit picking on that clown. I won't tolerate it.' As the model drew back he tripped and fell, and the other adult sat on the model and spanked him with a rolled-up magazine while reminding him of his aggressive behavior. As the model ran off cowering, the agent forewarned him, 'If I catch you doing that again, you big bully, I'll give you a hard spanking. You quit acting that way.'" ²⁴

Finally, a child in the "No Consequences" category saw a performance involving only the initial section of the above film, the part showing the adult's aggression toward the Bobo doll.

Each child was then observed in a ten-minute play session while alone in a room containing a variety of toys, among which were some similar to those used by the adult model on the film. Judges observed through a one-way screen and recorded the occurrence of imitative aggressive responses. Then the experimenter returned to the playroom, bringing an assortment of fruit juices and booklets of sticker pictures to be pre-

²³ A. Bandura, "Influence of Models' Reinforcement Contingent on the Acquisition of Imitative Responses," *Journal of Personality and Social Psychology* 1 (1965): 589-95.

²⁴ *Ibid.*, p. 591.

sented to the child as rewards. She then asked, "Show me what Rocky did in the TV program," and "Tell me what he said," promising to reward the child for each imitation performed.

The findings of this study have to do with how much imitative aggression each child performed spontaneously in the ten-minute session as compared with how much imitative aggression he showed himself capable of performing when offered an incentive.

As might be expected from the earlier studies, the children in the "Model Rewarded" and the "No Consequences" categories mimicked the adult model in their own free play, doing so more frequently than those in the "Model Punished" category. Again we have a demonstration that children imitate aggression they observe on television and again the finding that punishment of the adult in the television show serves to inhibit the children's tendency to imitate spontaneously.

When requested to imitate the adult's behavior and offered an incentive, each group of children performed more imitative acts of aggression than had been performed spontaneously in free play. This demonstrated that the children were capable of more imitative aggression than they had initially shown. Further, those in the "Model Punished" category could imitate aggressive acts just as efficiently as those in the "Model Rewarded" and "No Consequences" categories. Remarkably, the girls in this study (as had the girls in the other two) exhibited less imitative behavior in their own free play than the boys, but when offered an incentive for imitating aggression, they mimicked essentially as many aggressive acts as the boys.

Thus this third study of Bandura's reinforces the theory that children learn some of the behavior they observe. Some sequences of their learning are exhibited spontaneously in their play, and others can be elicited if the setting is right. This is equally true whether the observed behavior was condemned and had painful consequences, was rewarded and had positive consequences, or was neither rewarded nor punished and had no known consequences. The study suggests that the observed consequences of behavior have some influence on the sponta-

neous mimicking of that behavior, but none on the retention of the capability to imitate the behavior when offered an incentive for doing so.

A related study deserves brief mention. The participants were seventy-two children, ages six to eight, from a lower-middle-class neighborhood.²⁵ Every child saw the same four-minute color film showing an adult performing a series of novel acts with various toys. For example, when he first came on stage, the adult had his right hand cupped over his eyes. Later, he tossed bean bags at a target, but instead of standing erect, he bent over with his back to the target and threw the bean bags through his legs.

Children were assigned at random to three categories. Some simply observed the film. Others were instructed to verbalize every action of the model as they watched the actions unfold on the TV screen. Those in the third category engaged in competing symbolization, counting aloud while they watched the TV film: "One and a two and a three and a four. . . ."

Each child was then taken to a room containing the toys the adult had used in the film. The experimenter asked him to demonstrate every one of the model's actions he could recall. She praised and rewarded each correct response. She also prompted the child with a standard set of cues, asking him to show the way the adult behaved in the opening scene, to demonstrate what the adult had done with the dart gun, the Bobo doll, and the bean bags, and to portray the adult's behavior in the closing scene.

The children did very well in mimicking the adult they had just observed. Those who had simply watched the four-minute television show were able to reproduce an average of fourteen sequences of behavior. Not surprisingly, those children who had verbalized the sequences as they watched the same film could reproduce even more—an average of seventeen. As expected, completing verbal activity interfered with the child's

²⁵ A. Bandura, Joan E. Grusec, and Frances L. Menlove, "Observational Learning as a Function of Symbolization and Incentive Set," *Child Development* 37 (1966): 499-506.

retention of the film content—the children who had counted aloud during the film could reproduce only nine of the sequences afterwards.

Again we have a demonstration of the child's powers of observation and retention. Such demonstrations have interested other psychologists, and a number of them have conducted studies providing independent confirmation of this phenomenon.²⁶ What is especially significant about these studies is their concern with the child's behavior. Many questionnaire and interview studies report what people say they think and what they say they might do or not do, but these report what the subjects actually do.

Conclusions

Every civilization is only twenty years away from barbarism. For twenty years is all we have to accomplish the task of civilizing the infants who are born into our midst each year. These savages know nothing of our language, our culture, our religion, our values, or our customs of interpersonal relations. The infant knows nothing about communism, fascism, democracy, civil liberties, the rights of the minority as contrasted with the prerogatives of the majority, respect, decency, ethics, morality, conventions, and customs. The barbarian must be tamed if civilization is to survive. Over the centuries, man has evolved methods of accomplishing this.

Our methods of "socializing" the barbarian hordes who invade our community every year rely on their remarkable learning abilities. The infant learns by trial and error, and man has capitalized on this ability by rewarding infants for acceptable behavior and punishing them for unacceptable behavior. The infant develops a close attachment to one or two persons who care for him and meet his needs, and because of this he desires

²⁶ Mary A. Rosenkrans and W. W. Hartup, "Imitative Influence of Consistent and Inconsistent Response Consequences to a Model on Aggressive Behavior in Children," *Journal of Personality of Social Psychology* 7 (1967): 429-34; Deanna Z. Kuhn, C. H. Madsen, and W. C. Becker, "Effects of Exposure to an Aggressive Model and 'Frustration' on Children's Aggressive Behavior," *Child Development* 38 (1967): 739-45.

to conform to their wishes and expectations. Man has capitalized on the infant's propensity to make attachments by assigning special educative responsibilities to mothers and fathers. The young child learns through observation and imitation, and throughout the ages man has provided opportunities for young people to learn from their elders in apprentice relations—the girl learning housewifery by watching her mother, the boy learning farming skills by working alongside his father, the youngsters learning hunting skills by observing the experienced hunters. The young child learns through oral instruction, and man makes use of this opportunity by talking to children about the social group and its values and ideals, by relating legends, telling tales, gossiping, sermonizing, lecturing, conversing, explaining, scolding, and moralizing. The young child learns from graphic representations, and for many years parents have created pictorial representations of the culture, its religious symbols, its heroes, and its workers. All of these age-old techniques of socialization have enabled man to teach most of the young barbarians how to behave as members of the group if civilization is to flourish.

In the modern era, these techniques continue to be very important, but they have been joined by others whose impact is less understood. At first, the new methods of teaching were available only to a privileged few. Thus the method of teaching through written instruction reached only those who had been taught to read and who could gain possession of rare scripts. As the technology of printing and distribution of printed materials advanced, more and more individuals had access to the printed word, and more and more were taught the literacy skills needed to gain meaning from print. Thus the printed word became important in socializing the young. Any educated person is impressed with the extent of this importance, and perhaps it is worthwhile to remind the reader that the ability to read is acquired late in a child's life, long after his basic social learning has been accomplished, and the ability to read efficiently comes even later. The child is well advanced before he is so skillful in reading that the printed page can modify his behavior or alter his beliefs.

The newer forms of communication circumvent this difficulty. As we have discussed, they are meaningful to the illiterate as well as to the tutored. The most powerful of these new forms, movies and television, communicate with the individual both audibly and visually. The most powerful medium of all, television, accomplishes this feat in the individual's own home, bringing into that arena instantaneous reports of events in the world around him, not only in his neighborhood and city, but in his nation and other nations.

The fact that we do not think of the new media as being instructors for our young does not affect their teaching ability. Although it is not governed by a board of education, TV does teach. We think of radio, movies, and TV as "entertainment," but in fact children learn efficiently from them. Our media-saturated college students, born eighteen or twenty years ago, just as television was coming into prominence, get their kicks from playing "Trivia," a campy game of inconsequential questions and answers about radio, TV, movies, comic books, and popular songs in which the effectiveness of these media as teachers is demonstrated by the young people's ability to answer questions like "Who was Bob Hope's radio announcer?" "What was the consolation prize on 'The \$64,000 Question?'" and "Who was the singer of 'Come on-a My House?'" A trivia contest was held at Columbia University in 1967, with teams from Princeton, Yale, Pennsylvania, Barnard, and other elite schools battling it out, and with the winner receiving a trophy while a chorus sang the Mr. Trivia song—"There he goes, think of all the crap he knows." The proud winner declared, "You have to get your basic training from the time you are six until perhaps twelve or thirteen," and credited his success to "my garbage-filled mind."²⁷

The new media speak directly to the child's two best-developed senses, conveying a reality which is not very different from the other realities he experiences. A child who has seen President Johnson on television would recognize him instantly if he should encounter him; a child who has only read about

²⁷ "Triviaddiction," *Time*, March 10, 1967, pp. 69-70.

Mr. Johnson or heard his name spoken would not recognize him on sight, but instead would need to be told, "That's our President, Mr. Johnson." It is precisely the direct correspondence between reality and the television representation of reality—with no need for reliance on verbal labels for encoding and decoding—that makes television so powerful.

American children spend many hours a week watching television. They begin watching at a very young age, and are faithful to the set on weekdays and weekends, throughout the summer, and during the school year, with the result that at age sixteen, the average American child has spent as many hours watching television as he has spent in school. Is it a fair bet that the two sources of information have affected his social learning equally?

Perhaps, but one might lean toward television. The child turned to "the tube" at a younger and more impressionable age, and he attended the television school on his own initiative and volition, not because of the combination of social pressures, parental expectations, and truancy laws which enforce school attendance. One hears a great deal about school dropouts, but very little about those who do not watch television. The ability of television to hold its audience better than our schools can hold their students may tell us something about its superior effectiveness as a communicator and thus as a teacher.

What is this electronic mechanism teaching the child? The *Christian Science Monitor* completed a survey of TV programming six weeks after the assassination of Senator Kennedy. In 85½ hours of programming in prime evening hours and on Saturday mornings, 84 killings were observed. Both acts of violence and threats of violence were recorded.

The survey found that the most violent evening hours were between 7:30 and 9, when, according to official network estimates, 26.7 million children between the ages of two and seventeen are watching television.

"In those early evening hours, violent incidents occurred on an average of once every 16.3 minutes. After 9 P.M., violence tapered off quickly, with incidents occurring once every 35 minutes," the paper said.

"In the early evening, there was a murder or killing once every 31 minutes," the survey reported. "Later, once every two hours."²⁸

Everything that social scientists know about human learning and remembering tells us that this carnage is being observed and remembered by the audience. If children can remember and reproduce fourteen or fifteen sequences of behavior from one of Bandura's amateurish five-minute films, how much do they remember from hour after hour of professionally produced TV?

The fact that a student can recall the 1946 singing commercial, "Use Ajax, boom, boom, the foaming cleanser" when playing Trivia does not mean that he *will* use that foaming cleanser when he grows up and has to scour his toilet bowl. Similarly, the fact that children watch TV "pictures of mayhem, mugging, and murder"²⁹ does not mean that they *will* perform comparable acts of violence in their own lives. This is obvious from our crime statistics, which show that children are among the least violent of our citizens, and that violence is most characteristic of the adolescent and young adult male.

However, television time is sold to sponsors on the conviction that although the Ajax ad will not guarantee that the viewer will buy the product, it raises the probability that he will. Social scientists would simply make the same claim for filmed or televised violence, whether fictitious or real. Viewing the carnage does not guarantee that the viewer will "go forth and do likewise," but it raises the probability that he will.

Media spokesmen make much of the fact that as yet social scientists have no convincing proof for this hypothesis.³⁰ They minimize the fact that the evidence for it is accumulating year by year and at an accelerating rate. They also ignore the fact

²⁸ "84 Killings Shown in 85½ TV Hours on the Three Networks," *New York Times*, July 26, 1968, p. 29.

²⁹ Morris Ernst, quoted by George Gent in "Human Life Seen as Devalued by Violence in the Mass Media," *New York Times*, September 17, 1968, p. 78.

³⁰ Joseph A. Loftus, "CBS Man Doubts Violence Theory: Tells Panel Studies Fail to Establish Links to TV," *New York Times*, October 17, 1968, p. 87. This is an account of the testimony of Joseph T. Klapper before the National Commission on the Causes and Prevention of Violence.

that there is no convincing scientific evidence for or against most of our social practices and policies.

To the media spokesman, one is tempted to reply, "Media man speaks with forked tongue." The television industry exists and reaps its profits from the conviction that television viewing does affect behavior—buying behavior.

Is it fanciful to imagine that there may be a relation between the trivia game at Columbia in 1967 and the violence at Columbia in 1968? Where did the students learn the attitudes and the aggressive behaviors that they vented against the police? Where did they learn the implicit values that seemed to justify their expressing what may be entirely legitimate grievances in such profoundly antisocial ways? They acknowledge that their minds are "garbage-filled" by the media, and we may wonder whether they are "aggression-stuffed" by the same sources.

The evidence that we do have indicates that films and television are profoundly educative for their viewers, teaching them that the world is a violent and untrustworthy place, and demonstrating for them a variety of violent techniques for coping with this hostile environment. Whether this message is beamed as fact or fiction, it is accepted by young children. They incorporate in their own behavior patterns all the sequences of adult behavior they observe on television.

Whether they will ever employ these aggressive behaviors in their interpersonal relations depends on many complex factors. Every individual is capable of more different behaviors than he has occasion to display. Many of us remember our high school French, and although years pass without presenting us with any occasion to speak it, we continue to retain some capability of doing so when the occasion does arise. The analogy to television violence is not exact, for television as a school for violence enrolls adult viewers as well as high school students, and has them in class for many more hours than any French teacher ever did. When the occasion arises that calls for violence, one does not have to cast his mind to his high-school classroom, but only to last night's or last week's "thrilling episode."

What else will he remember from that episode? There was a murder every half hour during prime viewing time on 1968

network television. How many instances are there of constructive interventions to end disagreement? What other methods of resolving conflict are shown? How many instances of tact and decency could an avid viewer chronicle during the same hours? How often is reconciliation dramatized? How many adult acts of generosity are provided to children for modeling? What strategies for ameliorating hate are displayed? How many times does the child viewer see adults behaving in loving and helpful ways? What examples of mutual respect does he view? What can he learn about law and order? How many episodes of police kindness does he see? How frequently does the glow of compassion illuminate the screen?

C. PUBLIC OPINION AND POLITICS

INTRODUCTION

Mass Communications, Public Opinion, and Politics

IMPLICIT in Charles Cooley's contention that the distribution of information among the members of a society makes possible public opinion, and hence a "public will" which cannot help but influence the course of government, is the notion that information is power. Indeed, each of the various forms of political power can be characterized in terms of the information distribution which it allows, of how the communication channels are controlled, of how and to whom information is made available.

In authoritarian states, for example, control is usually exercised via institutionalization of censorship. That is, through control of the communication media authoritarian rulers attempt to shape the minds of the governed by giving them access only to information which supports the wisdom, or necessity, or benefits, of prevailing policies—policies which may have been determined with little regard to the desires of the people. The assumption is that to the extent that rulers are able to preclude availability of competing information (a condition which seldom, if ever, prevails), public support for their policies is reinforced.

Democratic forms of government, on the other hand, assume that the governed have the right and responsibility to influence the policies by which they are governed. Of course, the nature of such influence depends on the nature of the democratic organization. In the early New England town meetings, each enfranchised member of the community could vote directly on issues pertaining to his governance. Under our present form of representative government, on the other hand, influence is indirect, mediated through the representatives for whom we choose to vote and through their response to whatever public

opinion we can bring to bear. Regardless of the form that a particular democratic government takes, however, there is at least the implicit assumption that the people have a right to know, that they should be provided with any and all information which might help them to formulate opinions and to influence the policies they wish their government to follow.

In a society such as ours, this assumption gives the mass communication media a major role in governance. Because we are so large, because we must make numerous decisions about highly complex and specialized issues, only the media can provide us with much of the information necessary to enable public participation in government. Only the media can insure that this information is complete. Theirs is the responsibility of making sure that the public receives all available information about various issues *before* those issues are resolved by our elected leaders. Theirs is the responsibility of seeing that information is not censored, not distorted, not incomplete. Theirs is the responsibility of insuring that the power which information implies remains diffused throughout the populace. It is this responsibility which underlies Douglass Cater's labeling of the mass communication media as *The Fourth Branch of Government* (Vintage, 1965), a check, guaranteed by the Constitution, upon those branches of government to which we give the power of representing us.

This by no means implies that the elected leaders in a government such as ours do not attempt to use the communications media in order to shape the knowledge, opinions, and behavior of the governed. Indeed they do, both by trying to control access to information which might engender public disagreement with the policies they have formulated and by presenting us with interpretations of issues and images of candidates which they hope will be appealing to the public from which they derive their power. For example, we have recently witnessed the coining of the term "credibility gap," which derived from a lack of correspondence between information provided by the administration and later events which that information purported to describe; we have seen a vice-president attack the mass media for exercising their right—their duty—

to comment on and interpret administration statements; we have experienced an "embargo" on information pertaining to the Indochina war. It is difficult to interpret these examples, and others like them, as anything but attempts at censorship, as efforts to influence public opinion through limiting the public's access to information. Similarly, the millions of dollars poured into television by political candidates during recent political campaigns are also indicative of how political figures attempt to influence the public through mass communications. Because the electronic media enable politicians to bypass reporters and "go directly to the people," to a great extent opportunity to engage in judicious selection and presentation of information about candidates has passed into the hands of the candidates themselves. The result has often been a concentration on the candidate's image rather than on issues. Joe McGinnis's book, *The Selling of the President, 1968* (Trident Press, 1969), for example, is devoted to a description of how much like an advertising campaign devoted to product image a political campaign can become, of how political figures might manipulate mass communications to shape public opinion and response.

The public's protection, of course, rests with the mass communication media themselves. For if they assume what William Rivers has termed the adversary stance (*The Adversaries: Politics and the Press* [Beacon, 1970]), if they truly serve as the fourth branch of government, it is their responsibility to see that censorship, overt and covert, cannot be successfully exercised, that the critical information which candidates omit from their messages is made available, that more than one side of any issue is aired, more than one side of any candidate exposed to public view. To the degree that such responsibility is accepted, the public has the opportunity to consider all the information and to influence the course of their governance.

The four articles which follow provide some insight into the role of mass communications in political behavior. We begin with Cooley's classic description of how mass communications might function to enable the public to influence how they are governed. He argues that when information about the impor-

tant events and issues of the day is made available to large numbers of people, then public opinion and a "public will" cannot help but follow. And it is through such "public will" that people govern themselves. The piece by Bernard Berelson and his colleagues examines the role of the mass media in a specific political campaign before television became a significant factor. They found that although the media served to increase both knowledge about issues and interest in the campaign among some members of the public, there was little evidence that newspapers and radio influenced people to change their voting behavior. Similarly, Elihu Katz and Jacob Feldman's review of research on the Kennedy-Nixon debates finds that television appears not to have had any major impact on the electorate in terms of vote changes. They also conclude that the debates were less effective in presenting issues than in presenting candidates. Finally, Kurt and Gladys Engel Lang argue that we should not be surprised that there appear to be so few effects of mass communications during election campaigns. Rather, they see the media as contributing to changes in political opinion and shifts in the public mood during the periods between campaigns. It is the information made available to the public through the news columns, and the opportunity to discuss and digest this information apart from the heat of a campaign, that underlies changes in public opinion. The political campaign itself, then, may well serve simply to influence crystallization of long-term cumulative shifts in public opinion, shifts begun by providing the public with information about the events and issues of the day as they occur. To the extent that the Langs' assessment of the role of mass communications in the formation of public opinion is correct, then Cooley's vision of what mass communications *might* accomplish takes on added credence.

CHARLES H. COOLEY

The Significance of Communication

The following chapter was first published nearly sixty years ago, but the richness of Cooley's mind and his extraordinary insight into the organization of society still repay readers. The definition in the first paragraph is still quoted frequently. Even more thought-provoking, however, is his concept of communication as the tool by which the mind develops "a true human nature"; "a progressive invention, whose improvements react upon mankind and alter the life of every individual and institution". . . [that] "makes possible public opinion, which, when organized, is democracy." "When the people have information and discussion, they will have a will," he says, "and this sooner or later must get hold of the institutions of society." Professor Cooley was for many years professor of sociology at the University of Chicago. This is a chapter from his book, *Social Organization*. It is here reprinted by permission of Charles Scribner's Sons from *Social Organization*, pp. 61-65 and 80-90, by Charles Horton Cooley. Copyright 1909 Charles Scribner's Sons; renewal copyright 1937 Elsie Jones Cooley.

BY COMMUNICATION is here meant the mechanism through which human relations exist and develop—all the symbols of the mind, together with the means of conveying them through space and preserving them in time. It includes the expression of the face, attitude and gesture, the tones of the voice, words, writing, printing, railways, telegraphs, telephones, and whatever else may be the latest achievement in the conquest of space and time. All these taken together, in the intricacy of their actual combination, make up an organic whole corresponding to the organic whole of human thought; and everything in the way of mental growth has an external existence therein. The more closely we consider this mechanism, the more intimate will appear its relation to the inner life of mankind, and nothing will more help us to understand the latter than such consideration.

There is no sharp line between the means of communication and the rest of the external world. In a sense all objects and ac-

tions are symbols of the mind, and nearly anything may be used as a sign—as I may signify the moon or a squirrel to a child by merely pointing at it, or by imitating with the voice the chatter of the one or drawing an outline of the other. But there is also, almost from the first, a conventional development of communication, springing out of spontaneous signs but soon losing evident connection with them, a system of standard symbols existing for the mere purpose of conveying thought; and it is this we have chiefly to consider.

Without communication the mind does not develop a true human nature, but remains in an abnormal and nondescript state neither human nor properly brutal. This is movingly illustrated by the case of Helen Keller, who, as all the world knows, was cut off at *eighteen months* from the cheerful ways of men by the loss of sight and hearing, and did not renew the connection until she was nearly *seven years* old. Although her mind was not wholly isolated during this period, since she retained the use of a considerable numbers of signs learned during infancy, yet her impulses were crude and uncontrolled, and her thought so unconnected that she afterward remembered almost nothing that occurred before the awakening which took place toward the close of her seventh year.

The story of that awakening, as told by her teacher, gives as vivid a picture as we need have of the significance to the individual mind of the general fact and idea of communication. For weeks Miss Sullivan had been spelling words into her hand which Helen had repeated and associated with objects; but she had not yet grasped the idea of language in general, the fact that everything had a name, and that through names she could share her own experiences with others, and learn theirs—the idea that there is *fellowship in thought*. This came quite suddenly.

“This morning,” writes her teacher, “while she was washing, she wanted to know the name for water. . . . I spelled w-a-t-e-r and thought no more about it until after breakfast. Then it occurred to me that with the help of this new word I might succeed in straightening out the mug-milk difficulty [a confusion of ideas previously discussed]. We went out into the pump-

house and I made Helen hold her mug under the pump while I pumped. As the cold water gushed forth filling the mug I spelled w-a-t-e-r in Helen's free hand. The word coming so close upon the sensation of cold water rushing over her hand seemed to startle her. She dropped the mug and stood as one transfixed. A new light came into her face. She spelled water several times. Then she dropped on the ground and asked for its name, and pointed to the pump and the trellis, and suddenly turning round she asked for my name. I spelled 'teacher.' Just then the nurse brought Helen's little sister into the pump-house, and Helen spelled 'baby' and pointed to the nurse. All the way back to the house she was highly excited, and learned the name of every object she touched, so that in a few hours she had added thirty new words to her vocabulary."

The following day Miss Sullivan writes, "Helen got up this morning like a radiant fairy. She has flitted from object to object, asking the name of everything and kissing me for very gladness." And four days later, "Everything must have a name now. . . . She drops the signs and pantomime she used before, so soon as she has words to supply their place, and the acquirement of a new word affords her the liveliest pleasure. And we notice that her face grows more expressive each day."¹

This experience is a type of what happens more gradually to all of us: it is through communication that we get our higher development. The faces and conversation of our associates, books, letters, travel, arts, and the like, by awakening thought and feeling and guiding them in certain channels, supply the stimulus and framework for all our growth.

In the same way, if we take a larger view and consider the life of a social group, we see that communication, including its organization into literature, art, and institutions, is truly the outside or visible structure of thought, as much cause as effect of the inside or conscious life of men. All is one growth: the symbols, the traditions, the institutions are projected from the mind, to be sure, but in the very instant of their projection, and thereafter, they react upon it, and in a sense control it, stimulating, developing, and fixing certain thoughts at the ex-

¹ *The Story of My Life*, pp. 316, 317.

pense of others to which no awakening suggestion comes. By the aid of this structure the individual is a member not only of a family, a class, and a state, but of a larger whole reaching back to prehistoric men whose thought has gone to build it up. In this whole he lives as in an element, drawing from it the materials of his growth and adding to it whatever constructive thought he may express.

Thus the system of communication is a tool, a progressive invention, whose improvements react upon mankind and alter the life of every individual and institution. A study of these improvements is one of the best ways by which to approach an understanding of the mental and social changes that are bound up with them, because it gives a tangible framework for our ideas—just as one who wished to grasp the organic character of industry and commerce might well begin with a study of the railway system and of the amount and kind of commodities it carries, proceeding thence to the more abstract transactions of finance.

And when we come to the modern era, especially, we can understand nothing rightly unless we perceive the manner in which the revolution in communication has made a new world for us. So in the pages that follow I shall aim to show what the growth of intercourse implies in the way of social development, inquiring particularly into the effect of recent changes.

Modern Communication: Enlargement and Animation

The changes that have taken place since the beginning of the nineteenth century are such as to constitute a new epoch in communication, and in the whole system of society. They deserve, therefore, careful consideration, not so much in their mechanical aspect, which is familiar to every one, as in their operation upon the larger mind.

If one were to analyze the mechanism of intercourse, he might perhaps distinguish four factors that mainly contribute to its efficiency, namely: *expressiveness*, or the range of ideas and feelings it is competent to carry; *permanence of record*, or

the overcoming of time; *swiftness*, or the overcoming of space; *diffusion*, or access to all classes of men.

Now while gains have no doubt been made in expressiveness, as in the enlargement of our vocabulary to embrace the ideas of modern science, and even in permanence of record, for scientific and other special purposes; yet certainly the long steps of recent times have been made in the direction of swiftness and diffusion. For most purposes our speech is no better than in the age of Elizabeth, if so good; but what facility we have gained in the application of it! The cheapening of printing, permitting an inundation of popular books, magazines, and newspapers, has been supplemented by the rise of the modern postal system and the conquest of distance by railroads, telegraphs, and telephones. And along with these extensions of the spoken or written word have come new arts of reproduction, such as photography, photoengraving, phonography and the like—of greater social import than we realize—by which new kinds of impression from the visible or audible world may be fixed and disseminated.

It is not too much to say that these changes are the basis, from a mechanical standpoint, of nearly everything that is characteristic in the psychology of modern life. In a general way they mean the expansion of human nature, that is to say, of its power to express itself in social wholes. They make it possible for society to be organized more and more on the higher faculties of man, on intelligence and sympathy, rather than on authority, caste, and routine. They mean freedom, outlook, indefinite possibility. The public consciousness, instead of being confined as regards its more active phases to local groups, extends by even steps with that give-and-take of suggestions that the new intercourse makes possible, until wide nations, and finally the world itself, may be included in one lively mental whole.

The general character of this change is well expressed by the two words *enlargement* and *animation*. Social contacts are extended in space and quickened in time, and in the same degree the mental unity they imply becomes wider and more alert. The individual is broadened by coming into relation with a

larger and more various life, and he is kept stirred up, sometimes to express, by the multitude of changing suggestions which this life brings to him.

From whatever point of view we study modern society to compare it with the past or to forecast the future, we ought to keep at least a subconsciousness of this radical change in mechanism, without allowing for which nothing else can be understood.

In the United States, for instance, at the close of the eighteenth century, public consciousness of any active kind was confined to small localities. Travel was slow, uncomfortable, and costly, and people undertaking a considerable journey often made their wills beforehand. The newspapers, appearing weekly in the larger towns, were entirely lacking in what we should call news; and the number of letters sent during a year in all the thirteen states was much less than that now handled by the New York office in a single day. People are far more alive today to what is going on in China, if it happens to interest them, than they were then to events a hundred miles away. The isolation of even large towns from the rest of the world, and the consequent introversion of men's minds upon local concerns, was something we can hardly conceive of. In the country "the environment of the farm was the neighborhood; the environment of the village was the encircling farms and the local tradition . . . few conventions assembled for discussion and common action; educational centres did not radiate the shock of a new intellectual life to every hamlet; federations and unions did not bind men, near and remote, into that fellowship that makes one composite type of many human sorts. It was an age of sects, intolerant from lack of acquaintance."²

The change to the present regime of railroads, telegraphs, daily papers, telephones, and the rest has involved a revolution in every phase of life; in commerce, in politics, in education, even in mere sociability and gossip—this revolution always consisting in an enlargement and quickening of the kind of life in question.

² W. L. Anderson. *The Country Town*, pp. 209, 210.

Probably there is nothing in this new mechanism quite so pervasive and characteristic as the daily newspaper, which is as vehemently praised as it is abused, and in both cases with good reason. What a strange practice it is, when you think of it, that a man should sit down to his breakfast table and, instead of conversing with his wife, and children, hold before his face a sort of screen on which is inscribed a worldwide gossip!

The essential function of the newspaper is, of course, to serve as a bulletin of important news and a medium for the interchange of ideas, through the printing of interviews, letters, speeches, and editorial comment. In this way it is indispensable to the organization of the public mind.

The bulk of its matter, however, is best described by the phrase *organized gossip*. This sort of intercourse that people formerly carried on at crossroad stores or over the back fence has now attained the dignity of print and an imposing system. That we absorb a flood of this does not necessarily mean that our minds are degenerate, but merely that we are gratifying an old appetite in a new way. Henry James speaks with a severity natural to literary sensibility of "the ubiquitous newspaper face, with its mere monstrosity and deformity of feature, and the vast open mouth, adjusted as to the chatter of Bedlam, that flings the flood-gates of vulgarity farther back [in America] than anywhere else on earth."³ But after all, is it any more vulgar than the older kind of gossip? No doubt it seems worse for venturing to share with literature the use of the printed word.

That the bulk of the contents of the newspaper is of the nature of gossip may be seen by noting three traits which together seem to make a fair definition of that word. It is copious, designed to occupy, without exerting, the mind. It consists mostly of personalities and appeals to superficial emotion. It is untrustworthy—except upon a few matters of moment which the public are likely to follow up and verify. These traits any one who is curious may substantiate by a study of his own morning journal.

There is a better and a worse side to this enlargement of gos-

³ "The Manners of American Women," *Harper's Bazaar*, May, 1907.

sip. On the former we may reckon the fact that it promotes a widespread sociability and sense of community; we know that people all over the country are laughing at the same jokes or thrilling with the same mild excitement over the football game, and we absorb a conviction that they are good fellows much like ourselves. It also tends powerfully, through the fear of publicity, to enforce a popular, somewhat vulgar, but sound and human standard of morality. On the other hand, it fosters superficiality and commonplace in every sphere of thought and feeling, and is, of course, the antithesis of literature and of all high or fine spiritual achievement. It stands for diffusion as opposed to distinction.

In politics communication makes possible public opinion, which, when organized, is democracy. The whole growth of this, and of the popular education and enlightenment that go with it, is immediately dependent upon the telegraph, the newspaper, and the fast mail, for there can be no popular mind upon questions of the day, over wide areas, except as the people are promptly informed of such questions and are enabled to exchange views regarding them.

Our government, under the Constitution, was not originally a democracy, and was not intended to be so by the men that framed it. It was expected to be a representative republic, the people choosing men of character and wisdom who would proceed to the capital, inform themselves there upon current questions, and deliberate and decide regarding them. That the people might think and act more directly was not foreseen. The Constitution is not democratic in spirit and, as Mr. Bryce has noted,⁴ might under different conditions have become the basis of an aristocratic system.

That any system could have held even the original thirteen states in firm union without the advent of modern communication is very doubtful. Political philosophy, from Plato to Montesquieu, had taught that free states must be small, and Frederick the Great is said to have ridiculed the idea of one extending from Maine to Georgia. "A large empire," says Montesquieu,

⁴ *The American Commonwealth*, Ch. 26.

“supposes a despotic authority in the person who governs. It is necessary that the quickness of the prince’s resolutions should supply the distance of the places they are sent to.”⁵

Democracy has arisen here, as it seems to be arising everywhere in the civilized world, not chiefly because of changes in the formal constitution, but as the outcome of conditions which make it natural for the people to have and to express a consciousness regarding questions of the day. It is said by those who know China that while that country was at war with Japan the majority of the Chinese were unaware that a war was in progress. Such ignorance makes the sway of public opinion impossible; and, conversely, it seems likely that no state, having a vigorous people, can long escape that sway except by repressing the interchange of thought. When the people have information and discussion, they will have a will, and this must sooner or later get hold of the institutions of society.

One is often impressed with the thought that there ought to be some wider name for the modern movement than democracy, some name which should more distinctly suggest the enlargement and quickening of the general mind, of which the formal rule of the people is only one among many manifestations. The current of new life that is sweeping with augmenting force through the older structures of society, now carrying them away, now leaving them outwardly undisturbed, has no adequate name.

Popular education is an inseparable part of all this. The individual must have at least those arts of reading and writing without which he can hardly be a vital member of the new organism. And that further development of education, rapidly becoming a conscious aim of modern society, which strives to give to every person a special training in preparation for whatever function he may have aptitude for, is also a phase of the freer and more flexible organization of mental energy. The same enlargement runs through all life, including fashion and other trivial or fugitive kinds of intercourse. And the widest phase of all, upon whose momentousness I need not dwell, is

⁵ *The Spirit of Laws*, Bk. 8. Ch. 19.

that rise of an international consciousness, in literature, in science, and finally in politics, which holds out a trustworthy promise of the indefinite enlargement of justice and amity.

This unification of life by a freer course of thought is not only contemporaneous, overcoming space, but also historical, bringing the past into the present, and making every notable achievement of the race a possible factor in its current life—as when by skillful reproduction the work of a medieval painter is brought home to people dwelling five hundred years later on the other side of the globe. Our time is one of “large discourse, looking before and after.”

There are remarkable possibilities in this diffusive vigor. Never, certainly, were great masses of men so rapidly rising to higher levels as now. There are the same facilities for disseminating improvement in mind and manners as in material devices; and the new communication has spread like morning light over the world, awakening, enlightening, enlarging, and filling with expectation. Human nature desires the good, when it once perceives it, and in all that is easily understood and imitated great headway is being made.

Nor is there, as I shall try to show later, any good reason to think that the conditions are permanently unfavorable to the rise of special and select types of excellence. The same facility of communication which animates millions with the emulation of common models also makes it easy for more discriminating minds to unite in small groups. The general fact is that human nature is set free; in time it will no doubt justify its freedom.

The enlargement affects not only thought but feeling, favoring the growth of a sense of common humanity, of moral unity, between nations, races, and classes. Among members of a communicating whole, feeling may not always be friendly; but it must be, in a sense, sympathetic, involving some consciousness of the other's point of view. Even the animosities of modern nations are of a human and imaginative sort, not the blind animal hostility of a more primitive age. They are resentments, and resentment, as Charles Lamb says, is of the family of love.

The relations between persons or communities that are without mutual understanding are necessarily on a low plane.

There may be indifference, or a blind anger due to interference, or there may be a good-natured tolerance; but there is no consciousness of a common nature to warm up the kindly sentiments. A really human fellow-feeling was anciently confined within the tribe, men outside not being felt as members of a common whole. The alien was commonly treated as a more or less useful or dangerous animal—destroyed, despoiled or enslaved. Even in these days we care little about people whose lives are not brought home to us by some kind of sympathetic contact. We may read statistics of the miserable life of the Italians and Jews in New York and Chicago; of bad housing, sweatshops, and tuberculosis; but we care little more about them than we do about the sufferers from the Black Death, unless their lives are realized to us in some human way, either by personal contact or by pictures and imaginative description.

And we are getting this at the present time. The resources of modern communication are used in stimulating and gratifying our interest in every phase of human life. Russians, Japanese, Filipinos, fishermen, miners, millionaires, criminals, tramps, and opium-eaters are brought home to us. The press well understands that nothing human is alien to us if it is only made comprehensible.

With a mind enlarged and supplied by such training, the man of today inclines to look for a common nature everywhere, and to demand that the whole world shall be brought under the sway of common principles of kindness and justice. He wants to see international strife allayed—in such a way, however, as not to prevent the expansion of capable races and the survival of better types; he wishes the friction of classes reduced and each interest fairly treated—but without checking individuality and enterprise. There was never so general an eagerness that righteousness should prevail; the chief matter of dispute is upon the principles under which it may be established.

The work of communication in enlarging human nature is partly immediate, through facilitating contact, but even more it is indirect, through favoring the increase of intelligence, the decline of mechanical and arbitrary forms of organization, and

the rise of a more humane type of society. History may be regarded as a record of the struggle of man to realize his aspirations through organization; the new communication is an efficient tool for this purpose. Assuming that the human heart and conscience, restricted only by the difficulties of organization, are the arbiters of what institutions are to become, we may expect the facility of intercourse to be the starting point of an era of moral progress.

BERNARD R. BERELSON, PAUL F. LAZARSFELD,
AND WILLIAM N. MCPHEE

*Political Processes:
The Role of the Mass Media*

Two major voting studies, conducted in the 1940's, set a pattern for this kind of research. The first of these, in Erie County, Ohio, in the 1940 campaign, was reported in a volume entitled *The People's Choice* (Lazarsfeld, Berelson, Gaudet). This was the study from which developed the theory of the two-step flow. The second study, in Elmira, New York, was of the Truman-Dewey election campaign of 1948. In the following pages is the chapter from the Elmira study that summed up the authors' conclusions about the part played by the mass media in the campaign. They considered that the news columns during the campaign were not particularly one-sided, but that the editorials were. Among other things, they found "some" tendency for people to read and listen to their own side. One of the most provocative findings is that the more that voters exposed themselves to the mass media, the more interested they became in the campaign and the more strongly they came to feel about it; but still, the *less likely* they were to change their positions. In other words, the media seemed to be confirming viewpoints already held rather than challenging them. This is a chapter from *Voting: A Study of Opinion Formation in a Presidential Campaign*, copyright 1954 by the University of Chicago. It is published by permission of the authors and the University of Chicago Press. Dr. Berelson is president of the Population Council, New York; Dr. Lazarsfeld, a professor of sociology at Columbia (and for many years director of the Bureau of Applied Social Research); and Dr. McPhee, a professor at the University of Colorado.

THAT COMMUNICATION is characteristic of a democracy both its proponents and its opponents agree.¹ The latter deprecate democracy as a futile "debating society" in which policy and action are constantly obstructed by "mere talk." The advocates give a central place in their theory to the desirability and even the necessity of communication.

As society has outgrown the town meeting, questions have

¹ For a more extensive report on this subject see the Baxter dissertation.

arisen as to how far democratic communication is possible in a mass society. In our society, extension of the political debate far beyond the limits of face-to-face contact is made possible by the existence of the mass media. Newspapers, magazines, radio, and now television are essential for the process of "making the sense of the meeting" when the meeting involves more than fifty million participants.

Seen in this perspective, the familiar question as to whether the mass media "influence" elections is, on the surface, an absurd question. In the first place, it is dubious whether any decisions at all would be possible without some mass device for enabling the leaders to present their proposals to the people. Second, typical debates about the role of the media too often imply a simple direct "influence"—like a hypodermic stimulus on an inert subject—and that is a naïve formulation of the political effects of mass communications. Third, another common notion—that any influence of the media is somehow suspect, as if "interfering" with the rational deliberations of the voters—implies an autonomously operating electorate. Such an image is also unrealistic.

"The electorate cannot be regarded by itself, or in isolation, or as if it were a sovereign which was the beginning and the end, initiating everything and concluding everything. It is a part of a system of discussion."² This "system of discussion" analogy provides us with a good place to begin our analysis of the mass media in the campaign. For there is a system, and it involves the national parties and their candidates to supply the content, the media to transmit it, and the electorate to consume it. We take up each in turn.

What the Candidates Did

Democratic theorists have always insisted on the need for public debate among political leaders: "The bystander's only recourse is to insist upon debate. He will not be able, we may assume, to judge the merits of the arguments. But if he does

² Ernest Barker, *Reflections on Government* (London: Oxford University Press, 1942), p. 41.

insist upon full freedom of discussion, the advocates are very likely to expose one another. Open debate may lead to no conclusion and throw no light whatever on the problem or its answer, but it will tend to betray the partisan and the advocate. And if it has identified them for the true public, debate will have served its main purpose.”³ To what extent do the parties engage in genuine discussion and debate of relevant public affairs during a campaign when the whole nation can listen in?

In 1948 the official platforms of the two parties showed more similarities than genuine divergences. The Republicans and Democrats essentially agreed in their platforms planks on such subjects as foreign policy, civil rights, communism, housing, veterans, agriculture, and resources. Only on our two major issues was there disagreement: on inflation and price controls, where each party blamed the other for high prices; and on labor, where the Democrats came out for repeal of the Taft-Hartley law and the Republicans for “a sensible reform of the labor law.” Otherwise, it would take close comparative reading for Elmira to know from the platforms just how the parties differed on major issues.

Actually, American parties put the main burden of argument on their candidates. To what extent did the candidates themselves debate the campaign issues? The forty major speeches made by the two candidates in September and October—seventeen by Dewey and twenty-three by Truman—covered a wide range of topics, but there was by no means equivalent emphasis on them.

The opposing candidates tended to “talk past each other,” almost as though they were participating in two different elections. In that respect, at least, there was little meeting of the minds or joining of the issues between Dewey and Truman on some major topics. Each candidate stressed the matters considered most strategic and effective in his own propaganda. While Dewey was talking about unity, foreign affairs, and the communists (i.e., style issues), Truman was talking about the differing character of the Republican and Democratic parties on socio-

³ Walter Lippmann, *The Phantom Public* (New York: Harcourt, Brace & Co., 1925), pp. 113-14.

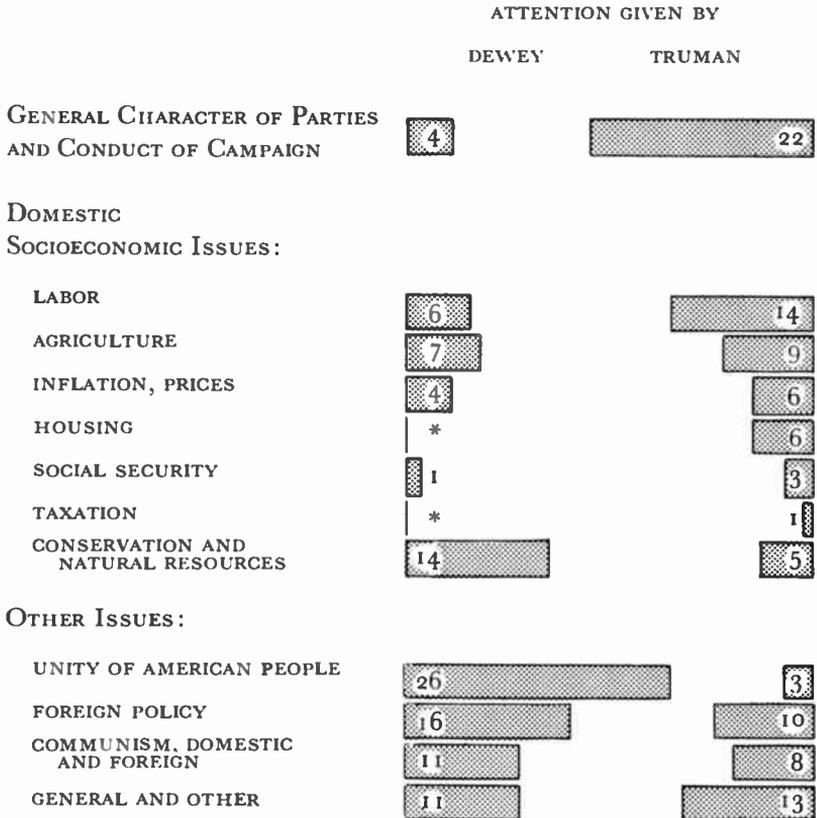


CHART 1. THE CANDIDATES DID NOT EMPHASIZE THE SAME TOPICS IN THEIR RADIO SPEECHES **

* Less than 1%.

** The speeches were analyzed from text versions appearing in the *New York Times*. Measurements are in column inches but they can be considered as measures of radio time also.

economic matters (i.e., position issues). Truman devoted almost 80 percent of his speeches to the discussion of current domestic issues facing the country—labor, price control, farm policy, housing, conservation, social security, taxes, and general

party philosophies on such matters (e.g., the New Deal)—whereas Dewey gave less than half his attention to them, and then largely to less controversial matters like conservation. Dewey dwelt to an especially large extent on the noncontroversial desirability and need for “unity” and “faith” in the United States.

This analysis implies that Truman courted but Dewey avoided what might be called genuine debate of truly controversial issues. Truman, in fact, asserted that this was the case. Again and again he claimed the Republicans would not state their position or their differences with him, and a simple index of the degree of genuine debate of this kind bears him out. In his speeches Truman treated the issues or topics of Chart 1 a total of ninety-six times in some substance. In seventy-six of these he explicitly *compared* the party positions, in this sense “debating” the issues in 79 percent of the instances. For Dewey the corresponding proportion was 30 percent (twenty-two out of seventy-four). If debate is thus defined as presenting the voters with an explicit choice between differing positions on controversial questions, Dewey generally failed to debate. What Dewey in contrast to Truman was doing can be illustrated as follows.

Dewey

The Republican party is engaged in this campaign for the express purpose of bringing our people closer together so that they can realize their great future and find peace with honor in the world [Des Moines, September 20].

This great campaign to strengthen and unite our country . . . has meaning far beyond our own shores. . . . We will be united. We shall find unity without uniformity [Boston, October 28].

Truman

Of all the fake campaigns, this is tops so far as the Republican candidate is concerned. He has been following me and making speeches about home, mother, unity, and efficiency. He won't talk issues [St. Louis, October 30].

They are afraid to go before the American people on the

merits of the policies they believe in. So they try to distract the people's attention with false issues [Boston, October 27].

In short, Truman stressed position issues of contemporary cleavage; Dewey, style issues of consensus. Each was no doubt taking what he considered the best political tack. Truman felt his best position was that based on the New Deal-Fair Deal. Dewey seemed to be sure of victory at the time, and he apparently saw no sense either in possibly offending some interest group or in prematurely committing himself to a clear position when he could preserve freedom of action by use of an ambiguous one. Dewey spoke as a "certain winner" who would shortly have to lead a Congress and a nation through difficult problems on which agreement would be needed. Thus the 1948 Dewey campaign may have provided a taste of what "debate" is like in an era when winners are assured and when there is no effective competition and presumably no likely alternative (as, for example, in 1924). Under such conditions, preaching of conciliation may typically prevail over discussion of controversial problems.

What the Local Newspapers Did

That was how the discussion was originated by the national parties and leaders and reflected in the national media (primarily the radio). Was something further added by the media at the *local* level, or was the national party propaganda simply passed along?

In the local press, newspaper stories on *official* party speeches, meetings, and statements were more frequent and more prominent than the columns, editorials, and occasional news stories originating from nonparty sources; in the sample of items presented for the respondents' recognition in late October, this ratio was about three to one. All the major items (speeches) on the radio were official. Only in the magazines did privately originated items prevail, and they were few. The situation is probably different in the larger cities, but in a small community like Elmira most of the campaign material that

comes to people's attention through the mass media derives directly from the official political parties.

However, there is some interpretation added by the press, and, more important, there has to be a considerable amount of *selection and deletion* to meet space limits. Moreover, that the media are primarily transmitting agents, from the parties to the voters, does not mean that they are neutral or inert in such selection. These strategic channels of discussion are largely owned and operated by men closely allied with one of the contending interests in contemporary disputes, namely, business and the business-professional classes. Such ties are not easily evaded in *any* democracy; for example, in state-organized communications systems (like the British Broadcasting Corporation) there is the corresponding problem of safeguarding channels of communication from influence by the incumbent administration. The way in which political information is transmitted by agents not neutral to that information presents a major problem to contemporary democracies.

Let us look at its severity in one instance where it might have been great—in the Republican press of a Republican town in what was for the American press generally a “Republican year.” Elmira's three newspapers, all published by Frank Gannett, were Republican, and they showed it. In a year when (by customary standards of what constitutes “news”) Truman was making at least as much news as his opponent, Elmira readers had almost a two-to-one better chance to find material favorable to Dewey.

Actually, however, the *news* columns were not particularly biased; about 40 percent of the two-party items favored Truman. The partisanship of the newspapers was confined largely to where most newspapermen believed it belongs—on the editorial page and in the signed columns (see Chart 2). Moreover, in the paper there was much nonpartisan reporting and comment. About 40 percent of the total number of items did not support either side, being accounts of campaign activities, round-up articles by the press services, etc.

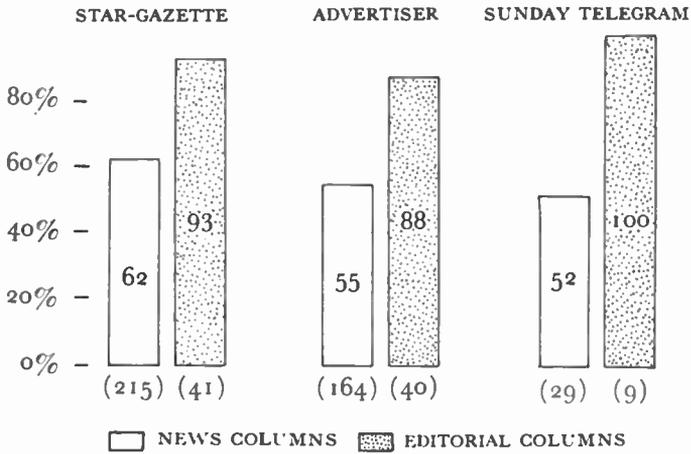


CHART 2. PERCENTAGE PRO-DEWEY OF TWO-PARTY ITEMS *

* Two-party items are those favoring or originating with one or the other side. An item is a separate news story, article, editorial, column, or cartoon. Note that the *Sunday Telegram* mostly clearly separated editorial position from news selection. The 40 percent of total items that were nonpartisan are omitted from this chart.

What the Electorate Did

But our main concern is with the electorate itself. How many individuals pay direct attention to the campaign via the mass media? Two answers can be given to this question. If the people themselves define what constitutes paying attention, the claims are modest. In June only 36 percent and in October 38 percent claimed to be paying a "great deal of attention to news about the election."

So much for subjective claims of attention; how about somewhat more objective checkups on the matter? Here we find an unexpected result. Far greater numbers, usually more than half, gave some evidence of familiarity with campaign materials. More people showed signs of exposure than claimed to be paying "attention." For example, about one-fifth followed the major conventions "very closely" (25 percent for the Republi-

can, 16 percent for the Democratic, and 7 percent for the Progressive), and another two-fifths "fairly closely" (43, 38, and 13 percent, respectively). When people were asked if they could "remember the last two items (about the election) you read in the newspaper," 50 percent could name at least one specifically; 55 and 23 percent could name analogous items on the radio and in magazines; and fully 74 percent recalled a reasonably specific item from at least one of the three media. When check lists of current news items from these media were shown the voters, the number who "remembered reading about or listening to" the items rose to 67 percent for newspapers and 77 percent for any of the three media. Minimum exposure was widely dispersed.

Yet despite this extended degree of "campaign exposure," which is in any case a matter of arbitrary definition, much campaign material "piles up" or overlaps among the few who are interested much more than the minimum. Those who scored high in communication exposure in one connection were more likely to score high in another (Chart 3). For example, (a) there was an overlap through *time*: people who paid more attention to campaign matters in June were also paying more in October; (b) there was an overlap by *channel*: people who read more campaign material in the newspaper also read more in magazines and listened to more over the radio; and (c) there was an overlap in *events*: people who followed the Republican convention more closely also gave more attention to the Democratic convention. In fact, every one of fifteen cross-tabulations possible in our data between paired measures of political exposure to the mass media was positive. In no case is there a reversal or even the absence of a relationship. Beyond minimum exposure levels there is a consistent and concentrated audience rather than a random and dispersed one.

This consistent and concentrated exposure is conditioned by many personal and social characteristics—membership in community organizations, education, class, sex, and (crudely) freedom from certain personality disorders. In each case there is a clear relationship to media exposure (Table 1, in which political interest is controlled, since exposure is highly correlated

(A) THROUGH TIME

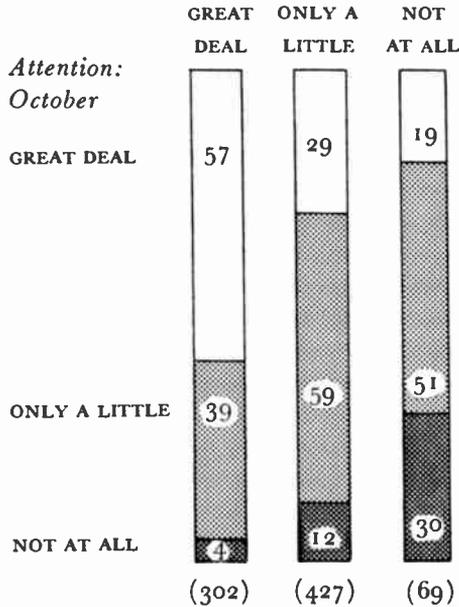
Attention: June

CHART 3. THERE IS CONSIDERABLE CONCENTRATION AMONG VARIOUS TYPES OF COMMUNICATION EXPOSURE TO THE CAMPAIGN *

* There is also concentration between media exposure and political discussion. Those "often" discussing politics were 33 percent of those high on the index of communication exposure, and only 11 percent of those middle or low. The heavy overlap in convention listening may be an interviewing artifact to some extent, since the questions were asked one after the other and since the answer to the first may have served as a halo for the second.

with it). Inferentially, the major determinants of media exposure to political materials appear to be (a) cultural and social awareness as well as civic participation, as represented in our data by organization membership; (b) habituation to dealing with abstractions and related communication skills, as represented by formal education; (c) subjective feeling of investment

(B) BY CHANNEL

Percentage Recalling One or More Items:

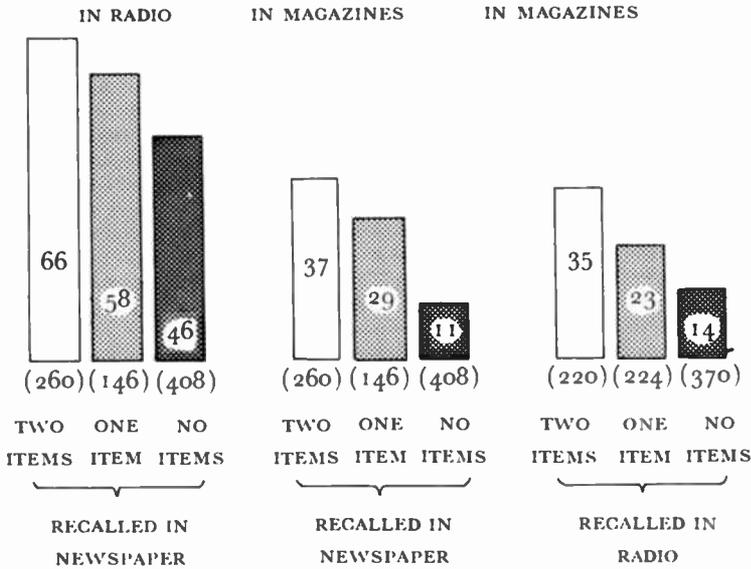
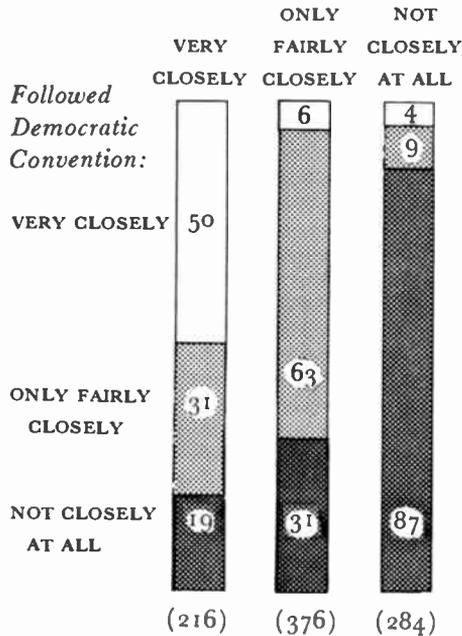


CHART 3, *continued*

in social and political power, as represented by socioeconomic status; (d) socially sanctioned responsibility for political affairs, as represented by sex; and (e) freedom from personal maladjustment that allows the individual to focus on public affairs in addition to private concerns, as represented by a (primitive) index of certain kinds of neuroticism. The “joiners,” the better educated, the better off, the men, the less troubled—these are the people who pay most attention to the political campaign as presented through newspaper, magazines, and radio.

Actually, a large part of the impact of these characteristics upon political exposure might be attributed to the general factor of social pressure. The social contacts in their primary groups channel the better educated and the better off toward the political content of the media; their fellows expect it of

(C) BY EVENT

Followed Republican Convention:CHART 3, *continued*

each other, and they have learned to expect it of themselves. Organization members are responding in part to this same sort of stimulation, produced by the very multiplicity of contacts. Men are traditionally and historically expected to know about politics. (Even the so-called "neuroticism" index is, among other things, a measure of social rapport, confidence, and trust.) Thus a given citizen's amount of attention to political materials in the mass media must derive in good measure from the amount of stimulation exercised upon him by the social environment—especially by his internalized expectations of how he should behave in this respect, built up by the groups in which he lives.

TABLE 1. WITH INTEREST CONTROLLED,* CERTAIN PERSONAL CHARACTERISTICS ARE RELATED TO THE AMOUNT OF POLITICAL EXPOSURE TO THE MASS MEDIA

CHARACTERISTICS	PERCENTAGE WITH HIGH OR HIGH-MIDDLE EXPOSURE (ON INDEX) †		
	LEVEL OF INTEREST		
	Great Deal	Quite a Lot	Not Much at All
<i>a) Organization membership:</i>			
Belongs to two or more	82 (103)	68 (87)	39 (64)
Belongs to one	72 (71)	57 (74)	34 (68)
Belongs to none	62 (100)	47 (112)	24 (126)
<i>b) Education:</i>			
College	88 (58)	62 (37)	48 (25)
High school	71 (166)	60 (171)	30 (152)
Grammar school and less	56 (48)	45 (62)	25 (81)
<i>c) Socioeconomics status:</i>			
Higher	79 (167)	63 (120)	39 (105)
Lower	60 (108)	52 (153)	25 (154)
<i>d) Sex:</i>			
Men	72 (122)	60 (124)	38 (110)
Women	71 (153)	54 (149)	25 (149)
<i>e) Neuroticism (index):</i>			
Low	77 (112)	64 (106)	30 (100)
High	67 (149)	50 (147)	30 (138)

* Since interest in politics is a mediating variable between these independent sources and the dependent phenomenon of media exposure, controlling interest works against the relationships. Even so, they are clear. Interest itself, of course, correlates highly with exposure: 72-56-31 percent high or high-middle on the index for those high, moderate, and low in interest respectively.

† The index of communications exposure used in this chapter is made up of two questions: one asking for free-answer recall of recent items seen or heard in the media, the other asking about recognition of sample items presented in a checklist. The measure was made in October but is used as an indicator of exposure at any time in the preelection period (see Appendix B).

Such people actively go after political content. But there is another type to whom political content "just comes." They "run across" political content in the media rather than seek it out. For people who pay *general*, nonpolitical attention to newspapers, radios, and magazines tend to see and hear more

political material, along with everything else (Chart 4). Thus the very accessibility of the medium "rubs off" a certain amount of political exposure. It would take almost deliberate action to keep from some exposure to politics under such conditions.

With the appealing devices of mass communications and their widespread use as habit, duty, or pastime, people are exposed to miscellaneous information about a far greater range of things than those in which they are genuinely interested. But, at the same time, they really follow only the few topics that genuinely concern them. On any single subject many "hear"

Percentage Recalling One or More Political Items in the Medium

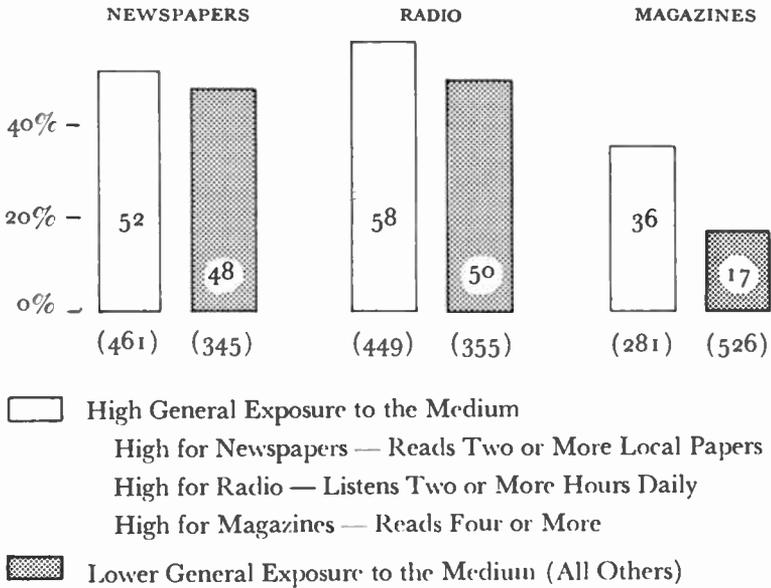


CHART 4. THE MORE ATTENTION TO THE MASS MEDIA IN GENERAL, THE MORE EXPOSURE TO POLITICAL MATERIALS IN PARTICULAR *

* This result holds with an interest control. The questions on general exposure were asked in June.

but few "listen." Together, the two types of attention merge in varying degrees and mixtures to make up the audience of the modern mass media on any topic. While only a minority is interested, the majority is accessible. So campaign exposure seems to be of two different kinds: (1) the heavy exposure of the few really "attending" to the campaign, and (2) the moderate exposure of the many "also present."

Now the latter kind of exposure must depend on the sheer volume of campaign material accessible in the media. It is a credit to the agencies of communication (media and parties) that far more Americans participate in politics than are really interested. But there is a limit—reached fairly soon—to what availability without interest can do. Beyond that, only interest based on enduring social involvements can go. The most likely sources of heavy as opposed to superficial communication exposure are in the main independent of and prior to the communications themselves. If minimum or superficial exposure can be "manipulated" externally by such matters as the volume and the accessibility of media materials, the conditions for more concentrated or serious attention lie in the society and individuals themselves.

All this relates to an old argument in connection with communication. There are those who think it "does no good" to make information widely accessible in which people are not basically interested. If this view prevailed, however, perhaps only a minority of Americans would vote, and even fewer would know, even rudimentarily, what they were voting for. On the other hand, there are those who hold the equally unrealistic view that if only Americans could be sufficiently flooded with mass media propaganda, good citizenship could be "sold" like toothpaste. These views are neither right nor wrong; the effective audience for politics today is a mixture of the minority who have reasons for learning about current political events and the majority who do not but who do learn something—"because it's there." ⁴

⁴ As to *what* people read and listen to, there is a slight tendency for people to see and hear their own side. But this was not particularly strong in Elmira.

The Effects of Political Exposure

What were the effects of the candidates' speeches and the media's transmission upon the electorate? Their effect upon the actual distribution of the vote will be taken up in the following chapter on changes in attitudes during the campaign. Here we shall deal with two preliminary effects—upon the intensity of political feelings and upon information about the election.⁵

EFFECTS UPON POLITICAL INTENSITY

The more that people read about and listen to the campaign on the mass media, the more interested they become in the election and the more strongly they come to feel about their candidate (Chart 5). In every comparison between those higher and lower in media exposure, interest and intensity increase from August to October.

Here is a finding that typifies the spiral effect of mutually influencing variables in complex human situations. "The appetite grows by what it feeds on." Communication exposure affects some of the factors that affect it. Exposure to a campaign obviously cannot lead a person to go back and get a better education so that he can listen more attentively to that campaign. In this sense, the matter is in part predetermined and the limits set. But such distant and independent conditions for

and each group of partisans paid considerable attention to the opposition. And despite the disproportion in availability, this was about the same for Republicans and Democrats:

Read or heard (of sample list)	Percent	
	Republicans	Democrats
More items favorable to Dewey	54	43
More items favorable to Truman	46	57
Total number of items	215	94

⁵ The effects described here hold for personal discussion as well as media exposure.

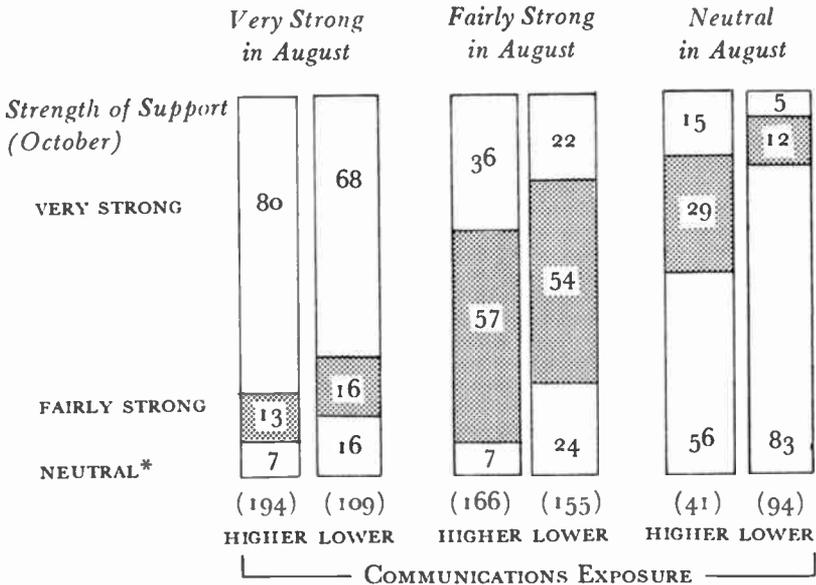
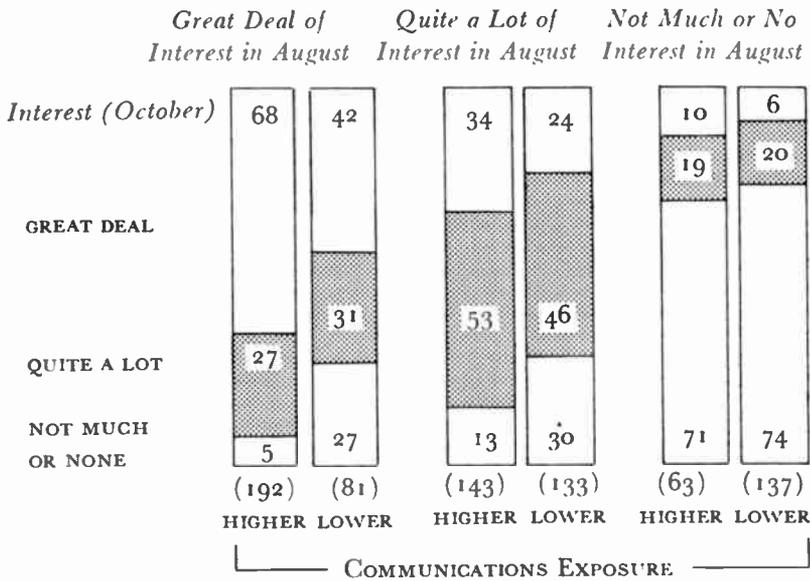


CHART 5. THE MORE MEDIA EXPOSURE ON THE CAMPAIGN, THE MORE POLITICAL INTEREST AND STRENGTH OF SUPPORT FOR THE CANDIDATE

* "Neutral" = undecided or do not intend to vote. "Very strong" = intend to vote and feel strongly for choice.

attention to political news may not enter into communication behavior in direct or "raw" form. Instead, there are connecting or mediating variables of a more proximate sort, such as the psychological conditions we call by such terms as a "sense of participation," "interest," or "partisanship."⁶

Such mediating variables are only loosely "fitted" to their more distant and more constant preconditions (like education). Not only does the greater freedom and variability of such mediating conditions increase the range of potential variation in communications exposure, but it permits an interaction between the two. Mass media exposure affects mediating variables like partisanship, interest, and discussion that in turn lead back to mass media exposure. There is thus the potential for a spiral build-up.

But this process does not, and presumably cannot, go on indefinitely. What limits it? First, there are the basic social and psychological preconditions for communications exposure, like education, that are not subject to manipulation in or by a political campaign. Here is where the electorate "normally" starts in the spiraling development of political exposure and political interest. But those not in at the start have that much less chance to be in at the finish. To them that hath shall be given. . . . Second, there are competing demands that take over attention, especially when the political campaign lacks intensity. And, third, there is probably a built-in check of satiation—a

⁶ In addition there is such a mutual-effect relationship between media exposure and personal discussion. The more people read politics, the more they talk politics; and, the more they talk, the more they read. For example:

	Percentage naming last person with whom politics discussed (October)*	
	Higher Media Exposure	Lower Media Exposure
Had talked politics in June	96 (190)	86 (133)
Had not	89 (238)	73 (226)

* This holds with an interest control.

In the same way, reading and listening lead to more of the same.

kind of psychological regression effect whereby more and more political exposure at one point becomes too much and the more interest builds up, the harder it becomes to build it further. In these ways the spiral effect of exposure and interest on each other must be "dampened," although not without a campaign build-up of each under favorable circumstances.

As a corollary of such increases in interest and intensity, the people who do more reading and listening are less likely to change parties and more likely to vote (Chart 6). Media exposure gets out the vote at the same time that it solidifies preferences. It crystallizes and reinforces more than it converts.

EFFECT UPON POLITICAL INFORMATION

Now for the second major result of media exposure: the more people read about and listen to the campaign in the mass media, the more likely they are to "know the score"—to know about the issues of the election and to perceive correctly the candidates' stands on the issues (Chart 7). (By controlling the accuracy of perception of *groups* in June, we attempt to show the increase in information about *issues* and the perception of issues in August as a genuine consequence of media-exposure habits). Obviously, a large degree of the voter's knowledge and perception of political reality—of what it is all about, what is being decided, what is at stake—must come primarily from mass media campaigns and their extensions through personal discussion. In our data media exposure always makes a difference in political information, no matter what other variables are controlled.

Now this effect serves to introduce and illustrate a phenomenon that the 1948 mass media campaign highlighted. Each voter may have several dozen motives, needs, values, attitudes, and other dispositions which could be brought into play in the election. Yet no one would be able to act if *all* his tendencies came into play at once; much less could an electorate as a whole come to any decision if the thousands of potential cross-currents within it were operative. But, in practice, a relatively few main dispositions came to the fore in a given era—that is,

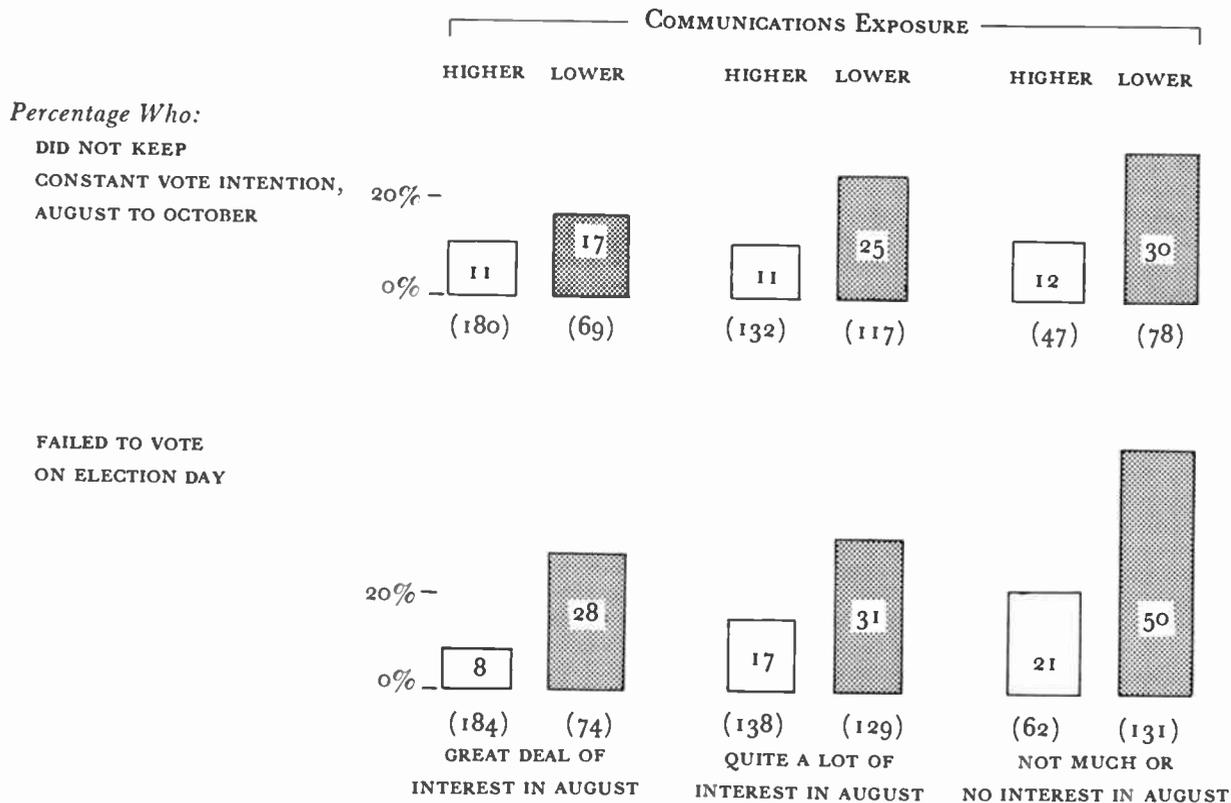
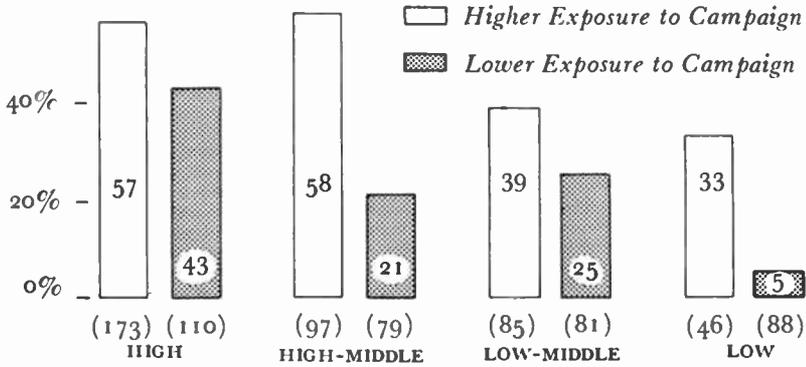


CHART 6. THE MORE MEDIA EXPOSURE ON THE CAMPAIGN, THE LESS CHANGE IN PARTY PREFERENCE AND THE MORE TURNOUT

Percentage with Three or More Accurate Perceptions of Issues in August



*Accuracy of Perception of Groups in June**

CHART 7. EXPOSURE TO MASS COMMUNICATIONS CLARIFIES POLITICAL PERCEPTION

* Perception of how poor people, rich people, Catholics, etc., will vote—asked in June. The index is a simple, cumulative count of correct perceptions.

are found relevant to issues in the political gateway of the time—and on them the elections of the time turn.

It is here that the content of mass communications must play a decisive role. It is the role of narrowing down, of focusing, of defining what elections mean, and thus determining on what few dispositions, out of numerous possibilities, the political outcome of the election and the political history of the era will center. How this process worked in 1948 in Elmira is analyzed in a continuation of the effects of campaign communication in the following chapter.

Summary

WHAT THE CANDIDATES DID

The 1948 candidates emphasized different topics in their campaign speeches.

The expected loser (Truman) stressed explicit comparisons between the parties (cleavage), but the expected winner dealt in unifying generalities (consensus).

WHAT THE LOCAL NEWSPAPERS DID

The news columns of the Elmira newspapers were not particularly one-sided, but the editorial materials were.

WHAT THE ELECTORATE DID

There is a concentration of media exposure to the campaign (a) by time: the same people tend to read and listen both early and late in the campaign; (b) by channel: the same people tend to read *and* listen *and* discuss politics; and (c) by events: the same people tend to follow both party conventions.

Exposure to the mass media on the campaign is affected by such characteristics as organization membership, formal education, socioeconomic status, sex (men), and personal adjustment.

Exposure to *political* materials in the mass media is higher for people who give more *general* attention to the media; hence, there appear to be two kinds of campaign exposure: a minority is attracted by active interest, and the majority is exposed by mere accessibility.

There is some tendency to read and listen to one's own side.

EFFECTS OF POLITICAL EXPOSURE

The more exposure to the campaign in the mass media, the more interested voters become and the more strongly they come to feel about their candidate.

The more exposure to the campaign in the mass media, the less voters change their positions and the more they carry through on election day.

The more exposure to the campaign in the mass media, the more correct information the voters have about the campaign and the more correct their perception of where the candidates stand on the issues.

KURT LANG AND GLADYS ENGEL LANG

The Mass Media and Voting

The general impression derived from voting studies in the 1940's and early 1950's was that the mass media really had little effect upon the vote. There were relatively few changers, and in these cases the principle influences seemed to be personal ones. The Langs take a hard second look at this conclusion. They redirect attention to the long-term cumulative influences of the mass media, as distinguished from what happens in the few months of the campaign. One remembers the remark attributed to Franklin D. Roosevelt, who deprecated the fact that 70 percent of the nation's daily newspapers opposed him editorially, and said that he would give the opposition the editorial columns during the campaign if he could continue to fill the news columns between campaigns. This paper is from *American Voting Behavior*, edited by Burdick and Brodbeck, published and copyrighted by The Free Press of Glencoe, Illinois, in 1962. It is reprinted by permission of the authors and copyright holder. Dr. Lang is a professor of sociology at the State University of New York, Stony Brook, and Mrs. Lang until recently has been a member of the staff of the Center for Urban Education, New York.

AFTER EACH NATIONAL ELECTION students of political behavior comment on how little effect the mass media appear to have had on the outcome. Franklin D. Roosevelt and Harry S. Truman won *in spite of* the press. The personal nature of the Eisenhower victory in 1952 showed that the campaign was so much shouting and tumult; the election was won before the campaign had even begun. Still, all of us—politicians, candidates, public servants, symbol manipulators, members of the Great Audience, and even students of political behavior in our private capacities as interested and partisan citizens—much as we may publicly belittle what the mass media do, act most of the time *as if* we believed in their potency. Republican members of the faculty pay for a newspaper ad supporting their candidate; the Democrats must counter with their own publicity. The vagaries of research lead us away from a principal concern with the impact of press, radio, television, and magazines, but

nothing would seem to have banished our not yet empirically demonstrated beliefs that the mass media are more influential than we would sometimes wish. Outcries against certain political television shows during and between campaigns, as well as the enduring and enthusiastic acceptance accorded to George Orwell's *1984*, indicate vividly that our research may not tell us what our common sense reveals is there to be told.

At first glance recent research on voting behavior appears to go along with this emphasis on *how little* the mass media determine the vote. The reader's attention is called to influences that intervene between the content itself and the individual's voting decision. Emphasis also moves away from a concern with the power once attributed to mass communications to the personal dispositions and group influences that circumscribe it.

None of the three voting studies—Elmira, 1948; Bristol Northeast, 1951; the U.S. national survey, 1952¹—draw any explicit conclusions to the effect that mass communications are *not* an important influence in voting behavior. They all point to their own methodological inadequacies, and in the most recent of the three studies the problem of mass-media impact has actually been avoided.² At many points, the importance of the mass media is stressed; nowhere is their role in connection with the vote actually belittled. Yet there may be a difference between the author's own interpretations and more or less popular understandings of what their findings mean.

Mass Communications during the Campaign

Exactly what do we learn about the influence of mass communication on voting behavior by studying its effect within the scope of a single campaign?

¹ B. R. Berelson, P. F. Lazarsfeld, and W. N. McPhee, *Voting* (Chicago: University of Chicago Press, 1954); R. S. Milne and H. C. Mackenzie, *Straight Fight* (London: Hansard Society, 1954); Angus Campbell, Gerald Gurin, and W. E. Miller, *The Voter Decides* (Evanston, Ill.: Row, Peterson, 1954).

² In a separate article, the authors have discussed the role of television but qualify their data in stating that they had "no clear evidence" on how it affected the voting. Cf. Angus Campbell et al., "Television and the Elections," *Scientific American* 188 (1953): 46-48.

Both the Elmira and the Bristol studies reiterate findings of earlier research. In Elmira the group who changed their voting intentions during the campaign, compared with those who followed through, included fewer people who were interested in the election. They were less "exposed" to the mass media, and they arrived at their decision later. Likewise in Bristol, "floaters [those inconsistent either in their intentions or in their vote], no matter what their final party, listened to fewer broadcasts and read fewer national newspapers than the regular voters."³ These observations are consistent with the most widely accepted finding on mass-media impact: "Media exposure gets out the vote at the same time that it solidifies preferences. It crystallizes and reinforces more than it converts."⁴

Accordingly, then, the election period serves less as a force for change than as a period for reclarification. There are several concrete circumstances in a campaign which severely circumscribe opportunities for observing the influence of mass-media propaganda.

Most obvious in this connection is the observation, confirmed in different contexts and by different methods, that the minds of most voters are closed even before the campaign officially opens. At various places and at different times, this figure has been set at anywhere from 50 to 84 percent of the voters.⁵ But even if a voter arrives at his decision late in the campaign, he is not necessarily in a constant quandary, endlessly pulled in opposite directions by conflicting propaganda. Evidence from panel studies indicates that in most cases where the final decision comes late in the campaign, prior learnings are crystallized into a firm intent. The impregnability of voting

³ Milne and Mackenzie, *Straight Fight*, pp. 96ff.

⁴ Berelson, Lazarsfeld, and McPhee, *Voting*, p. 248.

⁵ In Erie County, Ohio (1940), roughly one half were precampaign deciders. Cf. P. F. Lazarsfeld, B. R. Berelson, and Hazel Gaudet, *The People's Choice*, 2nd ed. (New York: Columbia University Press, 1948), p. 53. According to a Gallup poll before nomination day, 84 percent of the British electorate were already decided. (Cited by R. B. McCallum and A. Readman, *The British General Election of 1945* [London: Oxford University Press, 1947], p. 201.) British figures seem to hover around the 80 percent mark, with American figures, perhaps because of the more protracted campaign period, on the whole closer to two-thirds.

intentions as a whole limits drastically the number of people who are, so to speak, potential converts.

Moreover, during a campaign, people cannot help but be aware, however unhappily, that they are the targets of deliberate propaganda. Neither side enjoys a monopoly of available space or time, and so propaganda is almost always exposed as such. Expecting attempts at persuasion, voters come prepared with stereotyped meanings. It is not altogether unusual to hear speeches discounted as so much campaign talk. People, aware of the intent of the messages, tend to avoid views contrary to their own. They tend to believe their own side and to question the arguments of the other. As long as old loyalties are activated, selective perception will serve as an effective screen.

Campaigners themselves limit the conversion potential of their propaganda. While their aim is to activate partisan loyalties and to persuade the small undecided group, their speeches and political shows must not alienate anyone disposed to be on their side. The lore of politics is replete with the terrible specter of candidates who lost elections because of a few ill-chosen words.⁶

The campaign period, then, would seem inherently to be less a period of potential change than a period of political entrenchment, a period in which prior attitudes are reaffirmed. This may well be a real paradox of political life. We are accustomed to think of campaign periods as the dynamic times when political passions are aroused and wholesale changeover results, and of periods between as the quiescent years, when people tend to forget about politics and are less attentive to the larger political environment. Yet changes in political opinion and in the general political climate may be less characteristic of the days of arousal than of the "quiescent" times between campaigns.

At any rate, the number of people who have already "made up their minds" before the campaign begins, the overwhelming

⁶ Best known among these are the famous "rum, Romanism, and rebellion" phrase so successfully used during the 1884 contest; and Charles Evans Hughes's alienation of Hiram Johnson, which lost him California and, consequently, the election.

importance of "filtering" effects resulting from self-selection and selective perception of media content, and the awareness of the intent with which all campaign statements are phrased all work together to make "conversion" through any medium particularly difficult during an election. But, in addition, there is something in the way the problem is approached which may obscure certain ways in which the mass media are effective.

Let us briefly review how the impact of the mass media is detected in the panel studies.⁷ The authors of these studies investigate the initial voting intention and how it crystallizes and changes during the course of the campaign. They record individual "exposure" to the campaign—mostly in terms of attention paid to campaign materials, sources relied on, and the operation of self-selection. Then, by relating the voting intention to "exposure" within a framework of contextual factors, they infer the impact of that exposure. But among all the relevant "exposures," specifically what influences a vote cannot be easily inferred. More direct evidence about the content of that "exposure" and what it signifies to the consumer is necessary. To this end the researchers did ask at least one open-ended question that might (and did) elicit reports of particular speeches, news events, and broadcasts that helped voters "make up their minds." Yet the authors attribute no high validity to these retrospective answers. Consequently, the overall amount of attention paid to the campaign remains the main index from which to infer mass-media impact.

This approach allows the authors of these studies to relate generally "high" exposure to a rising interest in the campaign and to a strengthening of partisan conviction.⁸ Milne and Mackenzie point to a "hardening of opinion" after the campaign, which they find it "not unreasonable" to attribute to "persistent and concentrated propaganda."⁹

But to relate "exposure" to interest and partisanship is not

⁷There are important differences between the Elmira and Bristol studies. But our basic interest here is in the logic of their approach, not in a detailed methodological evaluation.

⁸Berelson, Lazarsfeld, and McPhee, *Voting*, pp. 246ff.

⁹Milne and Mackenzie, *Straight Fight*, p. 104.

to explain why people vote as they do. For such explanation the authors of the panel studies revert to an examination of people's prior political predispositions, their group identifications, and other variables which, by comparison with mass-media exposure, can be deemed relatively impermeable. These group measures, used in *Voting* and *Straight Fight* to "explain" voting decisions, are analogous to, though less explicit than, the set of "motivational" variables¹⁰ which the more recent Survey Research Center study focuses upon. To be sure, these generalized motivational variables—issue orientation, party identification, and candidate orientation—allow for the comparison of elections, but still unexamined are the processes by which "weights" come to be assigned to various elements involved in the voting decision.

As long as the loyalties and imagery of the electorate are treated as "givens," as they have been, rather than as themselves in need of explanation, the probability of understanding the nature of mass-media impact is duly minimized. The very emphasis on change *within* the span of a campaign makes it almost inevitable that whatever realignments occur are limited by the more permanent identifications and loyalties existing at the time the study is started. In the same way, both the amount of attention paid to campaign materials and the sources on which people rely follow motivational and social dispositions as they follow prior political opinions. All of these habits and orientations have their roots outside the campaign.

To sum up, whether the "strain toward consistency" which characterizes the campaign period is observed on the *individual* level as bringing attitudes into line with motivations or as the adjustment of a voting decision to the local pressures emanating from the *social* environment immediately relevant to the voter does not much matter. In either case, examination of change within this short span fails altogether to account for the cumulative impact of media exposure which may, over a period of time, lead to such changes in the motivational patterns

¹⁰ Namely, "attitudes, perceptions, and group loyalties which mediate between the external environmental facts and the individual response." (Campbell et al., *The Voter Decides*, pp. 7ff.)

as differentiate one election from another or to a breaking away of many "primary" groups from older allegiances.

Political Change

The study of long-range effects leads us to a comparison of elections and especially to a second look at the occasional election in which long-standing habits seem to be upset.

What, we have to ask, do the results of any election mean? What is a "vote for confidence" for a party in power returned to govern, and what marks a political turnover? The vote recorded at the polling place, though a climactic and discrete act, is after all but a summary measure. "Whatever we may not know about the act of voting itself, we do know that it is highly complex, the net result of influences from many other activities in which voters are engaged and of other experiences than those directly associated with political campaigns."¹¹ We cannot explain the vote unless we know the influences that are at work during the so-called "quiescent" times. What do the mass media contribute to political stability and to political turnover?

Underlying the "strain toward consistency" observed in election periods is the basic stability of the vote. This stability also extends over longer periods. There is a high correlation between a person's first vote and his subsequent choices. Moreover, geographic, demographic, and social groups often display surprisingly consistent (over time) voting rates and patterns. Such consistent loyalties are fostered, above all, through the linkage of party images with class (and other status) symbols and the reinforcement of these loyalties through the relatively homogeneous political environment in which a majority of voters appear to move.

The study of the Bristol constituency highlights this basic stability. It indicates the importance of party images and the relative insignificance in British politics of "candidate appeal."

¹¹ D. B. Truman, "Political Behavior and Voting," in Frederick Mosteller et al., *The Pre-Election Polls of 1948* (New York: Social Science Research Council, 1949), p. 225.

Only 19 percent of the respondents admitted that, in any of three elections since 1945, they had voted for a party other than the one they were supporting in 1951.¹² Indeed in 1951 not a single candidate in all of Britain was able to win for Labour a previously Conservative seat and reverse what was a slight (though politically decisive) shift toward the Conservatives. This may be attributed, in part, to the fact that candidates considered valuable to a party may be run in "safe" constituencies. Yet it principally reflects the decisive role of the national party struggle and the importance that must be attached to the efficacy of party images as such. "However unthinking many electors may be," a British scholar writes, "their votes do seem on balance to represent a general judgment between the merits of the national parties."¹³

What seems to matter in British politics is the party image—what the party stands for. As economic and social conditions change, so do the self-images of voters. Inasmuch as party loyalties reflect class loyalties, the successful party must manage to alter its image even if ever so slightly to take account of these shifts. The role of the mass media in disseminating the "appropriate" party image is apparent in *Straight Fight*. It is the national news sources that largely serve to channel to the electorate the party image with the pertinent symbols and clichés. Although the processes by which and the conditions under which these images are successfully communicated remain to be explained, Milne and Mackenzie conclude that national propaganda sources (as contrasted with local sources) have more "powerful direct effects."¹⁴

Such party images are obviously not the product of a single campaign; they are in existence, ready-made, long before the official contest begins. Their reinforcement through local pressures helps to give the vote its fundamental stability and to make much of voting a highly institutionalized and conventionalized activity, especially when, as in Great Britain, the party

¹² Milne and Mackenzie, *Straight Fight*, p. 26.

¹³ D. E. Butler, *The Electoral System in Britain, 1918-1951* (Oxford: Clarendon Press, 1953), p. 201.

¹⁴ Milne and Mackenzie, *Straight Fight*, p. 121.

ties are closely linked with class organizations, trade unions, and the like. But it is not only stability that we have to understand. Also to be explained is how long-standing habits are upset, and upset among many divergent local groups. The mass media would seem to play an indispensable role in producing the cumulative changes that are given expression in a turnover at the polls.

A possible turnover in the United States was forestalled in 1948. A rally back to the Fair Deal "decided" the outcome of the presidential vote in Elmira that year. In particular, the "waverers," strays from the Democratic fold, returned largely because of the salience of class issues, exactly those issues stressed by Truman during his campaign. National surveys confirm this Fair Deal rally as a nationwide phenomenon. Truman's benefits from those who in the early part of the campaign had been "undecided" or did not follow through on their original voting intention were twice as great as Dewey's.¹⁵ These late changers were 1944 Democrats switching back to the administration.

The importance of the mass media for the Fair Deal rally is flatly stated in the Elmira study. (The "salience of class issues was brought home through the mass media.")¹⁶ Though the image of Truman did *not* change, the image of what was important in the campaign did change. As the campaign progressed, socioeconomic issues became dominant. The change was most noticeable among persons high in mass-media exposure. The Fair Deal rally, based on renewed attentiveness to class issues which was helped along by the mass media, enabled the Democrats to chalk up still another victory. Not very much attention has been paid to this finding on the mass media.

Legend already has it that Truman, as he whistle-stopped across the nation, took his own case to the people and won despite a hostile press. What Truman actually did, it would seem, was to make "news." The press—or magazines or radio—could editorialize against the administration; their presentation of the news that Truman was making could be more or less subtly

¹⁵ Campbell et al., *The Voter Decides*, p. 12.

¹⁶ Berelson, Lazarsfeld, and McPhee, *Voting*, p. 264 n.

biased through headlines, spacing, choice of words, and the like. But since what Truman said was news, his appeal to class interests commanded attention and helped bring the strays back into the fold.

Nevertheless, the Truman victory in 1948 called attention primarily to what the mass media could *not* do. The results in 1952 surely have led us to reconsider the assumption that people will not, on the whole, cross party lines. The proportion of voters who did cross was undoubtedly small. But there were enough of these, together with previous nonvoters, to produce the Republican landslide. Primary group pressures, local influences, and latent dispositions of voters throughout the country failed to reinforce wavering allegiances to the Democratic party. The motivational pattern of the vote was different. If 1948 was largely a party year, in 1952 the "more variable factors of issues and candidates" assumed unusual importance.¹⁷ Some analysts have pointed to the long-term trends underlying these cyclical changes, such as the general prosperity prevailing, the upward mobility of minority groups, the trek to the suburbs, the industrialization of the South, and the general change from "interest" to "status" politics.¹⁸

That the mass media were a significant force in defining and structuring the decisive issues of the 1952 campaign and in "projecting" the candidates' personalities should be beyond dispute. The extent of this influence can unfortunately only be inferred. The campaign may have reactivated old loyalties, but, if it did, they were not the same old loyalties as in 1948. The issues were drawn differently. Where socioeconomic issues had invoked Democratic loyalties, the issue of national security, especially the Korean war, exercised a new attraction which worked in favor of the GOP. And, along with this, the public personality of General Eisenhower appealed to Democrats and Republicans alike, though not always for the same reasons.

¹⁷ Campbell et al., *The Voter Decides*, p. 184.

¹⁸ Cf. S. A. Lubell, *The Future of American Politics* (New York: Harper, 1951); Louis Harris, *Is There a Republican Majority?* (New York: Harper, 1954); and Richard Hofstadter, "The Pseudo-Conservative Revolt," *The American Scholar*, Winter, 1955, pp. 9-27.

Plausible as it may seem to impute a great impact to advertising techniques employed during the political war, to the novel role played by TV, and especially to the saturation of TV with filmed "spots," there is no evidence that the official campaign propaganda, as such, changed many votes.¹⁹ The "turnover" away from the Democrats had taken place before the official campaign opened. The campaign found the Republicans with a number of issues ready-made. From a postelection perspective, it appears evident that, in order to win, the Republicans had but to bring these vividly before the public. The real influence of the mass media, then, is to be sought in the play given communism and corruption in government and the controversies over Korea. These had been spelled out on front pages and in radio bulletins for some time. How, during the weeks of the campaign, the stalemated Korean war was restored from the back to the front pages of newspapers has been duly noted, though not yet systematically treated.²⁰

The campaign talk on Korea may not actually have "converted." It nonetheless kept open the psychological wound inflicted by a peacetime war. Straight news and campaign oratory were joined to keep attention on what could, it seemed, only redound to the benefit of Republicans. Only in this sense may the campaign talk have "converted" by preventing the return of Democrats to their party.

We can inquire similarly about media influence on the Eisenhower image. He was, in 1952, not simply the "man of the year." Already in 1945, Eisenhower enjoyed an immense popularity, though for a war hero not a popularity without precedent. The political appeal of the General seems to have resided less in what he stood for than in what he did not stand for. Few Democrats or Republicans, who, as early as 1948, were advocating an Eisenhower candidacy, seem to have been familiar with his views on important issues. His political ("partisan") lean-

¹⁹ As far as the campaign is concerned, Stevenson, if anyone, gained more in personal appeal than Eisenhower. Cf. Harris, *Is There a Republican Majority?* pp. 52ff.; and *The Influence of Television on the 1952 Election* by the Oxford Research Associates, Oxford, Ohio, December, 1954.

²⁰ Apparently such an analysis was conducted, but results have not yet come to our attention.

ings were not on public record, and what was on the record had not been publicized.

Neither, for that matter, do early Eisenhower enthusiasts seem to have placed any emphasis on his political views. It was the "personal character" that counted. Eisenhower seemed to appeal most to those voters who "placed less emphasis on ideology and more emphasis on personal qualities in their choice of a candidate."²¹ Yet at that time very few people had met Eisenhower "intimately" via TV, and there is no evidence that the personal image of Eisenhower originated with or was most prevalent among veterans of the European theater. But the image was there, ready for political exploitation, and it must be understood as a mass media-built image.

Personal Influence and Mass Influence

The mass media, then, exert some of the influence they do because they are more than a channel through which national party policy is brought before the local electorate. In filtering, structuring, and spotlighting certain public activities, the media content is not confined to conveying what party spokesmen proclaim and what the candidates say. All news that bears on political activity and beliefs—and not only campaign speeches and campaign propaganda—is somehow relevant to the vote. Not only during the campaign but also in the periods between, the mass media provide perspectives, shape images of candidates and parties, help highlight issues around which a campaign will develop, and define the unique atmosphere and areas of sensitivity which mark any particular campaign. Any long-run view, therefore, reveals certain differences among elections which make clear that in each case voters, much as they may respond to traditional allegiances, also respond to a unique historical situation.

The scheme of analysis outlined in *Voting* barely touches upon the role of the mass media in creating a secondhand reality, through which public policy is elaborated and the effects of

²¹ H. H. Hyman and P. B. Sheatsley, "The Political Appeal of President Eisenhower," *Public Opinion Quarterly* 18 (1953-54): 459.

that policy on the voter clarified and made tangible. The "main concern," we are told, "is with the electorate itself. How many individuals pay *direct* attention to the campaign via the mass media?"²² In this scheme the mass media act primarily as transmitters of content supplied by the national parties and by their candidates and subsequently consumed, in one way or another, by the electorate. The personal network of communications within the community hooks onto and makes use of the mass media. Opinion leaders usually pay more attention to the mass media than their peers, and they relay relevant information to those less firm in their partisan convictions.

In this transmission system which passes along arguments and information required in voting decisions, personal influence often seems more crucial and persuasive than mass media content. The reasoning seems to go as follows. The opinion leader can induce compliance not only through *what* he says; he can exert his influence in a flexible fashion and also provide gratifications that go with compliance.²³ The prestige of opinion leaders is often interposed between the mass media content and those who, on their own, pay no direct attention (or only very little attention) to the content itself. It is in aligning voters with their peers that personal contacts reactivate latent dispositions.

Opinion leaders thus seem often to counter the possible impact of counterpropaganda and to make effective the propaganda favoring their own side. This signal discovery of the ubiquity of opinion leaders has led many to pit the measure of personal influence against that of the mass media. Nothing could obscure the real character of mass media impact more than to pose the problem in this way. Personal and mass media influence do not act in the same way. Personal influence may govern a larger segment of any individual's behavior than do the mass media—and it may be easier to demonstrate how a husband influences his wife's voting decision than to demon-

²² Berelson, Lazarsfeld, and McPhee, *Voting*, p. 235 (italics added).

²³ Elihu Katz and P. F. Lazarsfeld, *Personal Influence* (Glencoe, Ill.: The Free Press, 1955), p. 185. Also J. T. Klapper, *The Effects of Mass Media* (New York: Columbia University, Bureau of Applied Social Research, 1949).

strate what the mass media have to do with her voting behavior—but from the viewpoint of the larger society, it is the influence of the mass media which is the most potent.

The persons generally designated by social scientists as “opinion leaders” prepare the ground for mass-media impact. They translate the mass media reality into the experience of local groups. Some persons may enjoy informal status as opinion leaders precisely because they attend to the relevant mass media content. Or it may be that in order to wield influence a man may have to be especially knowledgeable about what the mass media do and say. In either case, the opinion leaders exhibit greater responsiveness to the mass media, channeling for their peers—to whose dispositions they are particularly sensitive—that which the mass media have already made significant.

Theirs is essentially a transmission function and through them the views and interests of persons not directly exposed to the content of the mass media are involved. Yet these leaders select what they will transmit, and hence such influentials need not act only as a stabilizing influence. An emergent local leadership at odds with the official party may make use of whatever prestige or credibility the mass media content has per se to subvert older loyalties.

The short-run frame of reference, with its primary concern with the electorate and how it lines up within the course of a single campaign, has perhaps exaggerated the dominant role of personal influences and the effectiveness of “normal” social pressures. For it puts the accent on the type of changer who is most susceptible—perhaps by a sort of default—to such influences; that is, it draws attention almost exclusively to changers who are converted or whose decision crystallizes only *during the campaign*. In the first place, such persons are, quite logically, those with a relatively low interest in politics and for whom political loyalties are not ordinarily salient; second, they are further characterized by low mass media exposure.

Moreover, people who do *not* vote with their peers as well as people who do *not* vote in accord with their predispositions appear only as deviant cases among the overall consistencies

found in the panel studies. Deviants somehow get lost in the concern with how *A* influences *B* and how both *A* and *B* vote in line with their basic predispositions. Yet in order to understand the nature and extent of mass media influence—and especially their impact on the larger political trends that often mark off one election from another—it is precisely these deviants upon whom we may be forced to concentrate.

By way of brief explication, take the situation described in the Elmira study: women as a group are less interested in the campaign than men. In their voting decisions, they tend to follow their husbands. Yet at the same time, the “women’s vote” is less clearly linked to social class than the male vote. To put it more succinctly, women from the higher socioeconomic levels are less Republican than the men from those classes, whereas women among the working and lower classes are less strongly Democratic.²⁴ Somehow or other women follow their husbands’ leads and yet, by comparison with their husbands, vote less in accord with their class interests. Many plausible explanations commend themselves, but clearly the pattern of the “women’s vote” cannot be explained as the simple outcome of personal influence, however helpful this approach is in explaining individual vote changes.

The Bristol study does distinguish the “waverer” from the “changer.” And a follow-up of this distinction may serve to sharpen our knowledge of influences upon voting behavior. The “waverer,” although consistent in his vote over time, may move into the “undecided” column during any particular campaign or his “intentions” may (judged by what he tells us) appear inconsistent. The “changer” is one whose vote “at present” differs from that of the past, whether or not such a change is recorded within the span of a single campaign. We would contend that there is nothing in the Bristol or other data to indicate that the short-run regularities that mark campaigns reflect accurately the patterns associated with party turnover between elections and over longer periods of time. “Waverers,” for instance, may mostly be political indifferents who

²⁴ Berelson, Lazarsfeld, and McPhee, *Voting*, p. 61.

give way under the pressure of the campaign. But is this true of "changers"? Especially if their conversion occurs during the "quiescent" times between campaigns, when personal pressures are least likely to be deliberately exerted in a politically partisan way, it raises the possibility that such change, or the disposition to change, follows from their private communions with the mass media and the trickle of news reports. During a campaign, women will in all likelihood move toward greater agreement with their husbands. But when the political battle is less obviously joined, the influences weaning women as a group away from the class loyalties of their husbands may well be of a different sort.²⁵

The significant question at issue is, then, the pressures that cause people to vote out of accord with their local surroundings and out of accord with their group-anchored attitudes. No speculative answer can be accepted as adequate. Nonetheless, the response of individuals in the mass audience to certain non-local influences, however vaguely or indirectly they are perceived, is a problem with which research must contend. Voters, much as they interpret their secondary and symbolic environment in terms of their local milieu, do as individuals acquire certain general political perspectives that shape their responses during campaigns. Notions of politics, of parties, of issues, of candidates, and of their own roles as participating citizens cannot be satisfactorily explained by study of local communication networks. Along these lines, more than along others, ideas are affected by what the mass media present.

Secondhand Reality and the Mass Audience

Persons in the mass society are, as we all know, members of many more or less formally organized groups. Some of these memberships are, of course, more politically relevant than others. Trade unionists in the United States tend to vote Democratic; in England they most often side with Labour. Some mi-

²⁵ Harris, *Is There a Republican Majority?* Ch. 7, shows that women as a group gave a larger majority to Eisenhower than did men and that, especially, the wives of union members voted contrary to their husbands.

nority groups "stick together" politically, and some organizations formed to defend "majority" interests have their own characteristic voting patterns. We know a considerable amount about the political perspectives that derive from such memberships and about the cross-pressures exerted by multiple allegiances.

We are also aware that most of what people know about political life comes to them secondhand—or even thirdhand—through the mass media. The media do structure a very real political environment but one which, even in these days of TV, we can only know "at a distance." Because of the way people select from the political content of the mass media and interpret what they select, the political communication system serves to transmit materials peculiarly relevant to persons in various milieus. Beyond this, however, the mass media also structure a larger, nonlocal reality from which it is hard to escape. The content filters through, even though people are not directly exposed to it or do not claim to be paying a great deal of attention.²⁶ There is something obtrusive about what the mass media present, something that makes their influence cumulative.

The mass media have, then, another function. They not only transmit materials that feed into the political perspectives of relevant groups; they leave an impress of their own. There are political perspectives that rise out of an individual's position as a member of a mass, as the object of direct and indirect stimuli coming from the mass media. The relationships between voting behavior and the perspectives developed by virtue of one's position in the mass have as yet been inadequately investigated, perhaps because of the very real methodological difficulties involved, perhaps because we overestimate the difficulties or fear to risk criticism of our results.

The subsections that follow outline briefly *some* ways in which the media shape the perspectives of voters, so to speak, en masse. Whether individuals accept the media content as "au-

²⁶ Berelson, Lazarsfeld, and McPhee, *Voting*, report this "unexpected" finding: "More people showed signs of exposure than claimed to be paying 'attention.'"

thentic" or discount it as "propaganda," they nonetheless respond to it. The relationship of the following three areas of mass-media impact to voting, however apparent their relevance to politics, has so far not been systematically investigated.

THE DISSEMINATION OF DISTRUST

The mass media, by the way in which they structure and present political reality, may contribute to a widespread and chronic distrust of political life. Such distrust is not primarily a mark of sophistication, indicating that critical "discount" is at work. It is of a projective character and constitutes a defensive reaction against the periodic political crises known to affect a person's destiny as well as against what are defined as deliberate efforts to mobilize political sentiment.

How, we may ask, do the media encourage such distrust? Who is most prone to it? And how is it counteracted? The answers must be sought in the way in which the mass media tend to emphasize crisis and stress it in lieu of the normal processes of decision-making. Such distrust also has its roots in the complexity of events and of problems in which the mass audience is involved. For instance, since viewers bring little specialized knowledge to politics, even full TV coverage of major political events does not allay this distrust. In fact, it may abet it. The efforts of telecasters in 1952 to let the viewer in on everything happening at the conventions sometimes boomeranged.²⁷ Viewers, being overwhelmed, often felt less that they were being "let in on the inside" than that they were being kept out. People low in political competence and those who tended to take a sinister view of politics were especially prone to such hostile stereotypy.²⁸

²⁷ "Political Participation and the Television Audience," paper read by the authors at the annual meeting of the American Sociological Society, Washington, 1955.

²⁸ Cf. G. D. Wiebe, "Responses to the Televised Kefauver Hearings," *Public Opinion Quarterly* 16 (1952): 179-200, for a discussion of the phenomenon of "social impotence."

THE CHANNELING OF TRUST

How does this distrust express itself in voting or nonvoting? After all, people, in order to act politically, must form some credible picture about political questions. If we knew more about who trusts what mass media sources and how this trust is channeled, this knowledge would be a springboard for assessing how persons who withdraw from political mass media materials may periodically be stirred out of their apathy.

To study this, we might start with the characteristics of the consumers rather than those of the media. Certainly not all consumers of mass media materials approach the political content with the same orientations. Persons with above-average political sophistication (and therefore less subject to a "chronic distrust" of politics) are in the habit of checking one source of information against another. While, like all others, dependent on the mass media for information, they have a sort of natural immunity to the news slant of any particular medium. They are a "high" interest group and are usually firm in their voting decisions.

But what about those others who feel disbarred from channels of political influence and who would also seem most suspicious of politics in general? Will they distrust all mass media sources and believe only what their friends tell them? Paradoxically, the withdrawal of "interest" from political mass media materials may go hand in hand with high reliance on some particular trusted "medium" somehow exempted from the contamination imputed to the mass media as a whole. This would seem to put a high premium on "sincerity" and "honesty" and on a public personality radiating confidence. And, thus, under certain conditions, it would make those most distrustful of politicians most susceptible to mobilization.

The relation between chronic distrust and reliance on TV as a source of political information seems a particularly rewarding avenue for investigation. Pilot research suggests that television has an especially strong appeal for the chronically distrustful. Members of the audience feel themselves taken "to the scene of the crime," free to explore and follow their own clues. Inher-

ently, TV is therefore the most authentic of the media. The viewer is ready to believe that he "sees for himself," though what he imputes to the picture often originates in other news sources. The immediate and apparently "firsthand" experience of television makes direct experience seem as what may be the end product of a careful build-up. If politicians employing TV can find a successful formula for channeling the trust of persons usually apathetic to and distrustful of politics, the newly mobilized might become a dynamic force in politics, highly volatile and acting with great conviction at election time, but not necessarily out of sustained interest in public policy.

THE DICTATION OF PUBLIC IMAGINATION

The mass media force attention to certain issues. They build up public images of political figures. They are constantly presenting objects suggesting what individuals in the mass should think about, know about, have feelings about. There is implied in the way they address their audience, moreover, an appropriate way of looking at politics. By the materials they choose, the media may give us the semblance of an "acquaintance with" the political world, though most of us have but a most indirect knowledge of what it is all about.

The media can also stifle debate and criticism by defining certain elements in a situation as not *actually* subject to controversy. This is most easily done in relation to public personalities and "moral" issues. For example, during the Truman-MacArthur controversy in 1951, the press reported a striking unanimity of public sentiment. In addition to the official hero's welcome for the ousted General, they reported many minor public demonstrations aimed against the Truman administration and indicating sympathy for MacArthur. In retrospect, the unanimity of this sentiment appears to have been misstated.²⁹ For some months, however, public discussion took its cues from this assumed sentiment, and only the brave politi-

²⁹ R. H. Rovere and A. M. Schlesinger, Jr., *The General and the President* (New York: Farrar, Strauss, and Young, 1951), and Kurt and G. E. Lang, "The Unique Perspective of Television and Its Effect," *American Sociological Review* 18 (1953): 3-12.

cian dared to raise his voice publicly against MacArthur. Most waited until the storm "blew over" and MacArthur was no longer headline news. In much the same way, Democratic criticism of the Eisenhower administration appears to have foundered on the rocks of the unimpeachable hold of his personality on public imagination. How much, we may inquire, has the assumption of reporters about this unshakable popularity prevented them from featuring less popular images of the Eisenhower personality and thus helped to maintain the popular public image as such? This is one type of impact study which we need.

Such definitions of overwhelming public sentiment—"landslide perceptions"—tend to be cumulative. They influence political strategy; they inject a tone into news reporting; they seem to produce a certain reserve in personal discussion, since much conversation revolves around what is assumed to be held in common (like views on the weather). Politicians themselves believe in the importance of bandwagon effects in victory or defeat, and there have been attempts to assess the impact of election forecasts on election results. But this is not merely a matter of confidence or wanting to be on the winning side. For the communicator, assumptions about the public temper "legitimate" what is communicated to the mass. These assumptions likewise "legitimate" omissions. If the assumption about the unanimity of a public mood is erroneous, omissions of news about dissenting views or dissenting imagery make the unanimity much more marked than it is. For it tends to withdraw from personal discussion the very stuff that can be assumed as common political experience and, conversely, leaves uncriticized what everyone else is believed to approve. By influencing both public and private discussion, the saliency of what is at stake is affected, and where this influence enters campaigns, the election itself may be determined.

Individuals in the mass are likely to imagine what others in the mass are believed to be imagining.³⁰ Thus not only local influences but the beliefs imputed to nameless others exercise

³⁰ Gabriel Tarde referred to this phenomenon of contagion in his *L'Opinion et la foule* (Paris: F. Alcan, 1901).

their pressure in the mass. Surely, one of the more interesting approaches to mass media impact on political participation must be the study of private and public imaginations in relation to each other, and their joint relation to what we consider group-relevant reasons for casting a vote.

Conclusion

In this article we have set ourselves the task of exorcising the currently prevalent emphasis on *how little* mass media determine votes. We all are constantly exposed and sometimes concerned about mass media influence, and yet this influence escapes our research endeavor.

Studies in voting behavior have dealt with both long-run trends and short-run changes. In either case, since voting rates and voting decisions can be determined with a high degree of validity, we seek inferences about antecedent conditions influencing these end products of political activity. Such influences as age differences, regional locations, and traditional political affiliations which may affect voting habits can with relative ease be isolated for examination. When we come to deal with mass media influences, however, these are much more difficult to single out. They operate among a multitude of other factors and their effects do not always take tangible shape. Consequently, the measures of mass media exposure are usually crude and the effects looked for are relatively specific and short-run.

Quite naturally, campaign studies such as we have been considering have focused on the short-range influences operating during the period of active electioneering and on how these culminate in a final voting decision. It so happens, as we have tried to point out, that this approach to the problem, with its emphasis on individual conversion during the "official" campaign, minimizes the important cumulative influences of the mass media and emphasizes instead how political communications are transmitted through personal networks and how latent tendencies are activated. In this way, attention has been focused on the limits to mass-media influence.

Where the question for study is, "What makes the electorate tick?" research is naturally shaped to fit the problem; the mass media become just one among many concerns. On the other hand, experts in mass communications have not in recent years distinguished themselves by probing the long-range influence of mass media on political life—and more particularly on voting behavior. The cumulative and society-wide effects about which we often talk vaguely as shifts in public moods or drifts in political opinion are hard to demonstrate; yet, if we would further our knowledge of political behavior, such effects are much in need of clarification. And they can only be clarified through research specifically designed to get at them.

In turning attention to the continuous, and not only the intermittent, aspects of mass media influence, we must deal, first, with the role of *mass* communications as such, focusing not only on the communicator's job as a transmitting agent for party propagandists but on the direct impress the communications have on what individuals in the mass society know of the larger political world. We have to get at the political perspectives that rise out of the individual's remote participation in politics as a member of the mass and at the relationships between voting behavior and these perspectives.

Moreover, we must develop a more apt definition of relevant changes and "changers." In place of turnover during a campaign, changes in party allegiances between one election and the next, together with discrepancies between "fundamental dispositions" and voting decisions, ticket-splitting, and the like, are suggested.

A few specific problems for study have been directly outlined or indicated. The imagery made especially relevant by the mass media—the imagery of the "public imagination," of public personalities, of what politics is really like—and the relationship of such imagery to party alignments seem noteworthy. Among other subjects, the specific role of television, its authenticity and the exploitation of that authenticity by public officials and publicity directors, and the impact of such exploitation on voting participation constitute important areas for inquiry.

ELIHU KATZ AND JACOB J. FELDMAN

*The Debates in the Light of Research:
A Survey of Surveys*

In the 1960 campaign, for the first time, the two principal candidates for the American presidency engaged in a series of debates on national television. These meetings attracted very large audiences, wide interest, and extensive comment. They are generally believed to have made Kennedy much better known than he had been, and to have helped him overcome the advantage in public exposure Nixon had. They are believed to have contributed substantially to Kennedy's narrow victory. Katz and Feldman assembled all the studies they could find of public response to these debates, and in this chapter they analyze what seems to have happened to the electorate during and as a result of the television debates. Dr. Katz is a professor in the Communications Institute, Hebrew University, Jerusalem, and Dr. Feldman is a professor in the School of Public Health, Harvard University. The review is reprinted from *The Great Debates: Background, Perspective, Effects*, edited by Sidney Krause. Copyright 1962 by Indiana University Press. It is reprinted by permission of the publisher and the authors.

TO DATE we have been able to locate thirty-one independent studies of public response to the Kennedy-Nixon debates, and there may well be more. It is almost certain that this is the largest number of studies of a single public event in the history of opinion and attitude research. Considering how little advance notice was given that the debates were to be held, the response of the social research fraternity is as interesting as the public response. We propose to examine both.

Our search began with the invitation to us, from the editor of this volume, to comment upon six of the studies which follow.¹ Five of the six were initiated by university groups—four of them in schools of journalism—and were based on small samples of respondents living in communities nearby. The sixth was conducted on a very small budget, by a young market research organization in Chicago.

¹ Ch. 13-18. Ch. 12, which does not deal with audience reaction to the debates, is not included in the present survey.

In attempting to compare and contrast these studies and, hopefully, to arrive at some general conclusions concerning the impact of the debates, it occurred to us that there were probably other studies of the debates that would be worth examining. At the very least, we thought, we would find relevant data in the national and regional polls, and it seemed like a good idea to confront the small-scale, presumably more intensive, studies with the polls. And so we obtained the results of polls made by Gallup, by Roper (for the Columbia Broadcasting System), and in the various states (California, Iowa, Minnesota).

In addition, we knew of the continuing study of election behavior at the Survey Research Center of the University of Michigan and discovered, upon inquiry, that some questions on the debates had been included in their national postelection interview and that some part of the results had already been analyzed.

We learned, too, that each of the candidates had worked closely with a survey research organization. Claude Robinson of Opinion Research Corporation had studied the entire campaign very closely for Richard M. Nixon and, in addition, ORC's Public Opinion Index for Industry conducted supplementary research for its regular business clients. Louis Harris and Associates—in what was surely the closest relationship ever established between a presidential candidate and survey research—worked for John F. Kennedy. ORC agreed to give us access to their data; Harris did not.² We also learned that a group (acting as individuals and on a voluntary basis) associated with Social Research, Inc., interested the Kennedy organization in the desirability of obtaining depth interviews on reactions to the debates, but the results of this study were collated informally, presented orally, and, at least to date, have not been formally analyzed. Market Psychology, Inc., of New Brunswick, New Jersey, also contributed the results of a small study to the Kennedy campaign.

² Information about Harris's role in the campaign appears in Theodore H. White, *The Making of the President: 1960* (New York: Atheneum, 1961), and in (unpublished) papers delivered by Harris at the 1960 and 1961 meetings of the American Association for Public Opinion Research.

As we proceeded from agency to agency, we learned of even more work. Albert I. Sindlinger and Co., the market research firm which asks people not only what they are thinking but what they have been talking about recently, conducted an elaborate study of the campaign and paid particular attention to the role of the debates. Similarly, the marketing and opinion research firm of John F. Kraft collected extensive and interesting data. Both of these groups conducted national surveys, as did the market research firm of R. H. Bruskin and Associates. We discovered that the Schwerin Research Corporation, which maintains a special studio-laboratory for observing audience reactions to television programs and advertising under controlled conditions, asked its test audiences about the debates. Then, in the course of reading the Gallup poll, we found that the Gallup organization had actually gathered an audience in Hopewell, New Jersey, especially to record their minute-by-minute push-button responses to the first debate.

We remembered, too, that the regular TV-radio rating services, which supply the networks with data about their audiences, would have reported on the debates and, with the help of the research department of the National Broadcasting Company, and later of one of the agencies concerned (20),³ we gained access to these. It was with considerably more surprise that we learned that the research division of the Canadian Broadcasting Corporation had investigated the reaction of Canadian audiences, and these data, of course, promised to provide a new and nonpartisan perspective.

And, finally, informal circulation of a first draft of this manuscript unearthed still more studies, most of which were carried out on campuses of colleges and universities.

The Variety of Researches and Researchers

There are a number of ways in which this proliferation of studies can be meaningfully classified. Table 1 attempts this in terms of various aspects of research design and in terms of a cat-

³ Numbers in parentheses refer to studies in Table 1.

TABLE 1. THE STUDIES

Number	Name	Locale	Size of Sample	Timing ^a	Characteristics of Sample	Data Collection Procedures ^b	Principal Concerns ^c
1 ^d	Arbitron	National	1,400	Coincident	Random sample of listed phone numbers and probability sample of metered homes	PH; metered devices to record tuning behavior	Audience
2	R. H. Bruskin	National	2,500	V ₂	Modified sample area	I	
3	California Poll	State of California	Varied from 619 to 1,270 (A ₂)	P ₂ (twice) A ₂ D ₂	Modified area sample representing entire adult population (P ₂); registered voters (A ₂ and thereafter)	I	Audience Images Who won Favorability Issues Evaluation of performance
4	Canadian Broadcasting Corporation	7 major Canadian cities	4,800	D ₂	Individuals in systematic sample of English-speaking telephone households	PH	Audience Images Good idea? Evaluation of performance
5	Richard F. Carter, Institute for Communication Research, Stanford	4 cities near Stanford	Approx. 100	A ₁ -A ₂ -D ₂	Sample deliberately designed to contain ½ Republicans and ½ Democrats — probably well above average in SES	I	Audience Images Who won Issues Good idea? Recognition of content

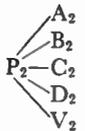
6	Creative Research Associates	Chicago	996 ^e	B ₁ -B ₂ C ₁ -C ₂ D ₁ -D ₂	Modified area sample of individuals old enough to vote	PH	Audience Images Favorability
7	Paul J. Deutschmann, Communication Research Center, Michigan State University	Lansing and East Lansing	159	P ₁ -A ₁ -A ₂	Those individuals from a 1958 general public panel who could still be located and were willing to be interviewed again (40% of original panel). All had listed phones and were registered voters. Sample above average in interest in politics.	I PH	Audience Change of intention
8 ^d	Alex Edelstein, School of Communication, University of Washington	Seattle (campus)	407	V ₁	Students (about 50% under age)	SA	Audience Images Favorability Role of debates in decision
9A	Gallup Poll	National	Varied from about 1,500 to 8,000	P ₂ A ₁ A ₂ D ₂	Modified area sample of individuals old enough to vote	I	Audience Who won
9B	Gallup Poll	Hopewell, New Jersey	60 in televote sample, 65 interview only	A (coincident)	Televote sample composed of undecided or wavering voters	Program analyzer	What liked

TABLE I. THE STUDIES, *continued*

Number	Name	Locale	Size of Sample	Timing ^a	Characteristics of Sample	Data Collection Procedures ^b	Principal Concerns ^c
10 ^d	Louis Harris and Associates						Who won
11	Iowa Poll	State of Iowa		P ₂ B ₂ V ₁	Modified area sample of adults		
12 ^d	Noel W. Keys and Alan Whiteleather, University of North Carolina	Chapel Hill (campus)	28	V ₁ (kinescope of 3rd debate)	Students	SA; program analyzer	Images What liked
13 ^d	Frederick Koenig and Carol Thometz, Southern Methodist University	Dallas (campus)	223	A ₁ -A ₂ -B ₂	Students	SA	Images Change of intention
14	John F. Kraft, Inc.	National	2,200 ^f interviews at P ₂ ; about 300 at A ₂ , 300 at B ₂ , 500 at C ₂ , 1,000 at D ₂		Modified area sample	I PH	Audience Who won Issues Change of intention

15	Sidney Kraus and Raymond G. Smith, Indiana University	Indianapolis	142	A ₁ -A ₂ -D ₁ -D ₂ -V ₂	Restricted to registered voters in families with TV sets and generally to families with listed phones. Approximately 16% completion rate among eligible individuals in original random sample.	I	Audience Images Issues Change of intention Actual vote
16	Gladys E. Lang and Kurt Lang, Queens College	New York City (and college campus)	95	A ₁ -A ₂ -D ₂	24 self-administered questionnaires by college seniors, 71 interviews with respondents selected by student interviewers. Well over 1/2 sample aged under 35, 13 individuals under voting age. Sample above average in socioeconomic status.	I SA	Audience Images Change of intention
17	Market Psychology, Inc.	New Brunswick, New Jersey	231	D ₂		SA	Evaluation of (Kennedy) performance
18	Minnesota Poll	State of Minnesota	1,000	C ₂ D ₂ A ₁	Modified area sample of adults	I	Audience Who won Favorability

TABLE 1. THE STUDIES, *continued*

Number	Name	Locale	Size of Sample	Timing ^a	Characteristics of Sample	Data Collection Procedures ^b	Principal Concerns ^c
19 ^d	Roger E. Nebergall and Muzafer Sherif, University of Oklahoma	Campuses in Oklahoma, Kansas, Washington, and elsewhere	Over 1,500	V ₁	Purposive sample of politically active students and others	SA	Who won Favorability
20	A. C. Nielsen Co.	National	1,100	A, B, C, D (coincident)	Probability sample (fixed panel)	SA (diary); metered device to record tuning behavior	Audience
21	Opinion Research Corp.	National	2,672 ^f		Probability sample of the general public—4 callbacks	I	Audience Who won Change of intention Actual vote
22	Elmo Roper & Associates	National	Approximately 3,000	P ₂ D ₂	Modified area sample	I	Audience Images Who won Issues Role of debates in decision
23	Schwerin Research Corp.	New York City	About 250-300 after each debate	A ₂ B ₂ C ₂ D ₂	Quota-controlled audience assembled to preview new TV shows	SA	Audience Who won Favorability Good idea?
24	Hans Sebald, Ohio State University	Columbus (campus)	152	V ₁	Students of sociology	SA	Recall of content

25	Sindlinger & Co.	National	Approximately 3,000 at each point in time	A ₁ A ₂ B ₂ C ₂ D ₂	National cross-section of individuals with listed phone numbers	PH	Audience Who won Issues Good idea?
26 ^d	Individuals associated with Social Research, Inc.	6-10 cities (different for each debate)	70-120 each time	A ₂ B ₂ C ₂ D ₂	Randomly selected individuals with listed phone numbers interviewed by pro-Kennedy volunteers	PH	Images Who won Evaluation of performance
27	Survey Research Center, University of Michigan	National	1,803	P ₁ -P ₂ -V ₂	Probability sample of the general public; long-term panel was supplemented by new sample to compensate for panel mortality and for new voters	I	Audience Favorability Actual vote
28	Percy H. Tannenbaum, Bradley S. Greenberg, and Fred R. Silverman, Mass Communication Research Center, University of Wisconsin	Madison (campus)	187	A ₁ -A ₂ -D ₂	Predominantly females residing in married student housing developments at the University of Wisconsin	I SA	Audience Images

TABLE 1. THE STUDIES, *continued*

Number	Name	Locale	Size of Sample	Timing ^a	Characteristics of Sample	Data Collection Procedures ^b	Principal Concerns ^c
29	Texas Poll	State of Texas	520	B ₂		I	Audience Evaluation of performance
30	Malachi C. Topping and Lawrence W. Lichty, Ohio State University	Columbus (campus)	114	D ₁ -D ₂	Sample of married students and wives in student housing development	SA	Audience Images
31	David Wallace, Bureau of Applied Social Research, Columbia University	Westport, Connecticut	Approximately 500	P ₂ V ₂	Sample of lists of registered voters		Who won

^a P₁ = previous election (same respondents).

P₂ = early in 1960 campaign.

A₁, B₁, C₁, D₁ = just before 1st, 2nd, 3rd, 4th debate.

A₂, B₂, C₂, D₂ = just after 1st, 2nd, 3rd, 4th debate.

V₁ = before election.

V₂ = after election.

^b I = personal interview.

PH = phone.

SA = self-administered.

^c Principal concerns are limited to those aspects of each study that deal directly with the debates.

^d Several of these studies are cited in the text only rarely or not at all. This is because, at the time of writing, they had not yet been formally analyzed (19, 26); or because they were not in a form that was immediately amenable to our purposes (1); or because we discovered them too late (8, 12, 13, 30); or because they were not made available to us (10).

^e About one-third of total interviewed before and after each debate.

^f In both Kraft and ORC a subsample of the original sample was re-interviewed on each of the successive waves.

alogue of primary substantive concerns. Thus several studies are based on nonrepresentative, small samples of students (e.g., 16, 24), while other employ representative national samples of 2,000 or more (14, 21, 22, 25, 27). Most studies were conducted by means of personal interviews; but some were conducted by phone (4, 6, 7, 25), by self-administered questionnaire (e.g., 17, 23), or by various combinations of these methods (14, 16, 28). Two studies (9B, 12) employed a "program analyzer" for recording and cumulating individual reactions of like and dislike during the actual broadcast of the first debate.

By the same token, some studies were conducted at only one point in time, others are based on the responses of matched samples of respondents at various points in time, while still others are based on repeated interviews with the same sample of respondents. To make this clear, we have labeled the four debates A, B, C, D, and have given the designation A_1 to information collected immediately (within a week or so) before the first debate, A_2 to information obtained immediately after the first debate, and so on. The designation P_2 refers to the early part of the 1960 campaigns—any time up to the period immediately preceding the debate. P_1 refers to information obtained before the 1960 campaign began. V_1 is the period after the fourth debate and before the election; V_2 refers to the days immediately after the election. Thus Deutschmann (7), for example, returned just before the first debate (A_1) and immediately after it (A_2) to a sample of respondents he had interviewed in a previous election (P_1). The use of this "panel" technique is indicated by the use of dashes ($P_1-A_1-V_2$) in column 5 of Table 1. Other uses of the "panel" method are illustrated in the studies (5, 16, 28) that interviewed before and after the first debate and then, once more, following the last debate ($A_1-A_2-D_2$), or in the rather more complex designs of the Opinion Research Corporation (21) or of John F. Kraft (14), in which large samples were interviewed before the first debate, and subsamples of the original sample were re-interviewed after each successive debate. In the Kraft study, the entire sample was interviewed again after the final debate, while ORC obtained the record of actual voting by returning after the election (V_2).

The studies range in focus from an exclusive interest in the size of the audience (1, 20), to a concern with the influence of the debates on voting intentions (6, 7, 16, 21). A number of studies were interested in perceptions of "who won" (e.g., 7, 11, 14, 22, 23, 31) and in various more specific evaluations of the performance of the two debaters (3, 4, 17). A number of studies focused on the related topic of changes in the "images" of the candidates as a result of the debates (e.g., 5, 6, 15, 22, 28). The public's perception of the issues and the substance of what was debated was also examined (5, 14, 15, 22, 25), but far less intensively. Several studies attempted to determine whether the debates themselves were considered a good idea (4, 5, 25). We shall attempt to summarize all of this in what follows.

This record of what actually was done calls back to mind a question that was raised at the outset. What explains the extraordinary number of studies? Given the short notice, and the elaborate resources required to carry out a survey, how are we to understand the overwhelming response of this large variety of research organizations?

The answer, in part, may become clearer from a closer look at the organizations themselves. Essentially, there seem to be two helpful dimensions in terms of which these organizations can be classified. One is whether the organization looks for its primary sources of support, its "audience," and its "profit," to the academic world or the business world. Although commercial and academic research organizations are often staffed by people with the same background, and although there are several forums which provide for interchange between them, there are some obvious differences which must be taken into account in explaining a decision to undertake a study.

The second dimension that seems relevant is whether or not the organization is a veteran in the study of election campaigns. The veterans, of course, could provide for the debates very easily in the normal course of their business; they really didn't need much warning. But what about the others?

The four types of organization which emerge from interrelating these two dimensions present the following picture.

The *commercial veterans*, it is clear, were all ready for the

debates. The announcement that the debates were to be held called merely for revision of some questions and, probably, some revision in the timing of the interviewing periods. The motivation for organizations of this kind (3, 9, 11, 18, 21, 22, 25, 29, etc.) is keeping the public abreast of public opinion and, incidentally, calling attention to themselves, to their marketing and opinion services, and to the accuracy of their results. Support for these studies typically comes from the newspapers and newspaper chains which carry their releases and, occasionally, from private clients such as a candidate for office on the national or state level (e.g., 21).

There are not many *academic veterans*, but the best known of these is surely the Survey Research Center (27). Like the commercial veterans, these were already "in the field," so to speak, when news of the debates arrived. Support for this work typically comes from foundation grants and results are reported in academic books and journals. There is, in addition, a more explicit concern with testing hypotheses rather than simply presenting facts.

The nonveterans, of course, are harder to explain. If the academic veterans' primary interest is in the field of election and opinion research, the *academic nonveterans* appear to have been drawn primarily from communication research. Rather than being interested in elections per se, they seem to have been attracted by the opportunity to assess the impact on the process of decision-making of a new form of communication—indeed, one that may become an institution in democratic politics. Thus almost all of the studies in this group (5, 7, 8, 12, 13, 15, 16, 19, 24, 28) were carried out by professors in centers of research in journalism and communication and, in the case of Kurt and Gladys Lang (16), by a team which has become famous for what has been called "fire-house research" in the field of communication. It is this quality of rousing a few volunteers, assessing the extent of the fire and devising a strategy for coping with it that characterizes these studies. As a rule, there was no established routine on which to fall back, no staff already in the field and, of course, no elaborate financing. The emphasis, instead, is on the more microscopic examination of

the processes involved. (When there are other, more comprehensive studies in the field this, of course, can be the only acceptable rationale.) The locale for these studies is necessarily confined to one or several communities in the immediate environs of the university (see Table 1) or sometimes to the student body itself (8, 12, 13, 24), and the results are reported in journals and in books such as this.

Some of the *commercial nonveterans*, too, share a special interest in communication research. This is blatantly obvious in the case of the rating services (1, 20) and, indeed, these should not be treated as special "studies" at all since they are merely byproducts of a nonstop operation. The Canadian Broadcasting Corporation (4), though not altogether a commercial organization, or the Schwerin Research Corporation (23), provide better examples. Each has a continuing interest in communication research which explains its interest in the debates. Somewhat different, however, is the motivation of the several market research organizations which are not veterans of election studies. In one case (2), questions about the debates were hitchhiked onto other studies then in the field. In another case (6), a special study of the debates was hurriedly designed and fielded—but not until after the first debate had come and gone. A third case—the major study in this category—seems best explained in terms of the determination to become a veteran. This is the case of John F. Kraft, Inc. (14), which, like the veterans, had already resolved to study the elections and, when the debates were announced, decided to modify the research design to take the debates into account. Two studies (17, 26) were designed to make contributions to the Kennedy campaign.

This group of studies, then, combines elements of some of the other groups. As with the commercial veterans, there was a staff and a sample available, but as with the academic nonveterans, there was no readily available routine of election study. Again, as with the commercial veterans, some studies (6, 14) were reported in newspaper columns (presumably in return for a certain amount of financial support), and some (2, 23) were reported in house organs.

Altogether, then, it took a special combination of resources and interests to move into the field so quickly. There was no time to apply to a foundation, and very little time to find a client (and difficult to think of a likely one). The commercial organizations had staffs on hand; the academic organizations had students. The veterans were already in the field; the non-veterans were attracted by the research opportunity. Many had an immediate audience in mind; typically, these were newspaper readers. Those who had neither money nor clients were motivated by the quest for knowledge or, perhaps, by bets with their friends as to "who won." In any case, our guess is that these studies range in cost from \$5 to \$100,000, and while the veterans spent more money than the nonveterans, and the commercial organizations more than the academic, the correlations are by no means perfect.

The Audience

In examining the findings of these studies, we shall be concerned with both their similarities and their differences. Similarities of research results will give some assurance of their reliability. Differences will cause us to question the accuracy of one or another study, to point out aspects of research design that might explain discrepancies, and, if worst comes to worst, to cast doubt on survey research.

The place to begin, of course, is with the audience. Who heard the debates? Who was available to be influenced? (See Table 2.)

Most of the studies have an answer to this question, at least in terms of the overall total of viewers and listeners. The national studies are virtually unanimous in placing the figure for the first debate at 60 to 65 percent of the total adult population (9A, 14, 20, 21, 25). Some of the local studies show higher figures (5, 7, 28) because they tend to include respondents with higher education and greater political interest. Altogether, some 70 of the 107 million U.S. adults—and perhaps another 10 to 15 million young people—watched or listened to the first debate.

TABLE 2. PERCENT OF ADULTS VIEWING (OR LISTENING TO) DEBATES^a

Study Number	Name and Locale	First Debate	Second Debate	Third Debate	Fourth Debate	One or More	All 4	Remarks
3	California Poll (state)	65						Registered voters
4	Canadian Broadcasting				54 (weighted)			% of TV households
5	Carter (local)	81	76	67	61			
6	Creative Research Associates (local)		71	64	64			
7	Deutschmann (local)	75						44% stayed tuned throughout
9A	Gallup (national)	60				80		Registered voters
14	Kraft (national) ^b	65	66	65		87		
18	Minnesota					88		
20	Nielsen (national) ^c	66	62	64	60	90		% of TV households viewing 6 minutes or more

21	Opinion Research Corp. (national)	66	49	51	49		1st debate viewing only; others viewing plus listening
22	Roper (national)				56	83	30 Viewing only ("seen on television")
23	Schwerin (local)	65	47	47	59		
25	Sindlinger (national)	66	69	58	61		12 yrs. or older; approximately 45% stayed tuned throughout each debate
27	Survey Research Center (national)					79	
28	Tannenbaum (local)	87					

^a Viewing plus listening unless otherwise noted (see Remarks). Approximately 10% of total are listeners rather than viewers.

^b Figures for debates 2 and 3 on the assumption that those (about 1/3) who could not be contacted watched or did not watch in same proportions as those who were contacted.

^c An estimate of proportion of total population viewing may be obtained by using the Nielsen estimate of total individual viewers. Percentaging these on a base of 129 million (population of 12 years and over) gives figures of 60%, 62%, 64%, 54% for the four debates respectively.

Compared with the first debate, the figures for the various studies are less consistent concerning the subsequent debates. Furthermore, it is difficult to know how to account for the effect of the different days of the week (Monday, Friday, Thursday, Friday) and the different hours of the day (9:30, 7:30, 7:30, 10:00 EST). The Nielsen ratings (20) show a decline in percent of TV homes tuned in ⁴ (measured by coincident metered readings) but, interestingly, a larger total audience (measured by diary records) for the second and third debates (80 and 82 million individuals) than for the first (77 million) or the last (70 million). This is almost certainly due to the fact that the second and third debates were on the air early enough in the evening to have included more children and, possibly, more adults with early bedtimes. In any event, a conservative estimate would be that at least 55 percent of the total adult population watched or listened to each of the debates and, altogether, that upwards of 80 percent of the population saw or heard at least one of the debates (9A, 14, 20, 22, 27). The average debate viewer was in the audience for some 2½ hours—that is, for three of the debates.

Surely this is one of the great political assemblages of all time. Still, there are some other facts which ought to be noted for the sake of a balanced perspective. First, it should be borne in mind that the proportion of adults who turn on their sets on an average weekday evening—according to a study made in July, 1960 (25)—is in the neighborhood of 70 percent and, from another study, that about 45 percent of adults are at their sets during an average evening hour.⁵ In other words, a very large proportion of the debate audience was immediately accessible; little effort had to be exerted to rally them. Moreover,

⁴ Since the debates were carried by the three major networks, there was little choice open to the viewer if his set was on at all. About 88 percent of sets in use during the hours of the debate were tuned to the debates (20).

⁵ *Report on Audience Composition*, Television Bureau of Advertising, 1959. Note that this study is somewhat dated and, moreover, that seasonal fluctuations are tremendous. According to the A. C. Nielson Co. report, *Television '61*, the average evening audience for January-February (when 55 percent of TV homes tune in their sets for an average of about 6 hours per day) is 64 percent greater than the July-August audience.

there is little doubt that the relative absence of alternative program choices inflated the debate audiences. Among the Canadian cities studied, for example, audiences ranged between 50 and 60 percent for the fourth debate, except in Calgary—the only city among those surveyed offering an alternative program—where the figure dropped to 35 percent (4). Again, two studies (7, 25) suggest that the attention span of the audiences is an important factor to reckon with. There is reason to believe that as much as one-third of the audience for each of the debates watched less than the entire program (25). The fact that the Nielsen (20) figure for TV homes reached by the first debate does not decline similarly (68.5 percent for the first half hour, 64.2 percent for the second half hour) may mean only that the set remained on even though family members drifted away, or that the tune-outs only slightly exceeded the tune-ins.

Nevertheless, it is evident that the audiences for the debates were exceedingly large. A comparison of Monday, September 26—the evening of the first debate—with the previous Monday evening reveals a higher proportion of sets in use throughout the evening and a *rise* in the size of the audience when the debate began at 9:30 P.M. (65.9 to 68.5 percent of TV homes) in contrast to the previous week's *decline* (59.5 to 55.0 percent). As Stanley Kelley, Jr., infers from his examination of these figures, it seems clear that people stayed home (and stayed up) to watch the debate.⁶ Analyzing other Nielsen reports to assess the meaning of the figures, Kelley points out that whereas the first debate entered 66.4 percent of homes with television, the most popular evening show around the time of the first debate attracted some 39 percent of television homes, while huge audiences for the Sunday game of the 1960 World Series and the most popular half hour of the three-network broadcast of the Democratic convention reached about half of the TV homes. On the other hand, according to Nielsen, 92 percent of TV homes tuned in one or both political

⁶ For an interesting account of the campaign as a whole, and the debates in the perspective of the campaign, see Stanley Kelley, Jr., "The 1960 Presidential Election," in K. Hinderaker, ed., *American Government Annual, 1961-62* (New York: Holt, Rinehart and Winston, 1961).

conventions (for an average of 15½ hours of viewing) and a like proportion were at their sets to view the election returns (for an average of 2½ hours.⁷) Both of these events slightly eclipsed the debates audience, though the latter, of course, was much more concentrated in time.

Concerning the composition of the audience, several studies found almost equally high proportions of both Nixon and Kennedy supporters attending (9, 18).⁸ While there was a correlation between educational level and viewing, over 50 percent of those with a grade school education or less were there (9), although the first debate was much more successful in this respect than subsequent debates (21). And several studies show (7, 25) that those who did not actually see the programs read about them or heard about them. Sindlinger (25) reports that 67 percent of all newspaper readers (which consists of virtually the entire adult population) read about the first debate within twenty-four hours and about half talked about each of the debates within the same time period (7, 25). Naturally, most of these were people who also heard or saw the programs but some also learned about them—and, certainly, many understood them better—by virtue of exposure to these supplementary sources of information. We have the impression that not more than 10 percent of the population failed to learn about the debates within twenty-four hours.

But listening to the debates, as we have said, did vary according to education (7, 9, 18), ranging for the first debate from three-fourths of the college-educated to just over half of those with grammar school or less. It varied with occupation (80 percent of business and professionals; two-thirds of clerical and sales; half of manual workers and farmers). People in the East and West (and perhaps in the Midwest) listened more than those in the South (9, 25). Most interesting of all, it varied with

⁷ From *Television '61*.

⁸ Opinion Research Corporation (21) finds somewhat higher proportions of Nixon supporters in the audience for Debates 3 and 4. Interestingly, as we shall show below, these were the debates in which Nixon is thought to have done better. But the more likely explanation is that Nixon supporters, on the whole, were somewhat better educated and therefore more likely to continue in the audience.

religious affiliation. Three studies (7, 9, 18) find disproportionately more Catholics in the audience, despite the fact of the generally higher educational and occupational status of the Protestants. Indeed, those Protestants who mentioned religion as the "most important issue of the campaign" were much less likely to be viewers (7).

Research on voting behavior has all but dispelled the myth of the "independent voter"—the ideal citizen who does not make up his mind until election eve, when he retires to the quiet of his study to weigh the opposing arguments of the two parties. The truth is that people who make up their minds late in the campaign are likely to have very little interest in the election.⁹ This is reflected in the debate audience, too. Viewing of the debates was related to strength of commitment to candidate or party. "Independent voters" were far less likely to hear the debates (7, 9, 21, 27). It is also worth reiterating that, by a wide margin, the first debate drew in larger proportions of the less-informed segments of the public than any succeeding debate.

Only two studies (5, 25) report on the context in which the listening or viewing took place. Carter (5) found that viewing was done in the company of family members (usually just the spouse) and, occasionally, of friends and neighbors. Only one-fifth of the respondents listened alone. There is evidence (14, 20, 25) that, over the period of the debates, people were increasingly in their own homes. Radio listeners (some 10 to 20 percent) were much less likely to be at home; indeed, about one-half listened in their cars (25).

Interest in the Debates

A Gallup Poll (9A) taken before the first debates found 55 percent of a national sample of adults looking forward to the debates with "a lot" of interest. Sindlinger (25) found that 90 percent of the population age 12 and over knew of the debates in advance. Furthermore, compared with both the 1952 and

⁹ See Bernard Berelson, Paul F. Lazarsfeld, and William N. McPhee, *Voting* (Chicago: University of Chicago Press, 1954).

the 1956 campaigns, more people were interested in the campaign (9, 25) and more were open to influence than had said so in 1952 or 1956. For example, more people said they "thought a lot" about the campaign in 1960 (9), and there was some tendency to make up one's mind later in the 1960 campaign than in 1948, 1952, and 1956 (76 percent knew whom they would support at the time of the 1956 conventions as compared with 60 percent at the time of the 1960 conventions [27]).

No less important was the overall increase in the use of television as a medium for the presidential campaign (8, 27). In 1952, 31 percent of a national sample credited TV with bringing them "most information" about the campaign; 49 percent of the same respondents said so in 1956, and 60 percent in 1960 (27).¹⁰

The TV debates, then, were introduced into a campaign which was attracting unusually high interest and were presented via a medium which had emerged as the predominant source of campaign information.¹¹

Did people find the debates interesting? Did they think the debates were a good idea? The evidence that the overwhelming answer is "yes" is abundant, though much of it can only be inferred rather than established directly. Only three studies asked directly. Sindlinger (25) asked after each debate, "Do you think these face-to-face meetings between Nixon and Kennedy are a good idea, bad idea, or just what do you think?" The California Poll (3) asked, "Do you feel that this kind of debate between presidential candidates is a good way or a poor way to get the issues across to the American public?" The Canadian Broadcasting Corporation (4) asked, "Are you glad you had the

¹⁰ Almost all of the decline came from radio; newspapers continued to be credited by about one-quarter of the population as the source that brings "most information."

¹¹ The crediting of TV with so much importance as a source of information concerning the campaign probably reflects the importance of TV as a medium of up-to-the-minute news. In most other areas of ideas and advice, people tend to choose magazines over TV. As we shall argue below, TV is primarily perceived as a medium of entertainment. For data on this general area, see "A Study of the Magazine Market," Part II, conducted for the Magazine Publishers Association by the Market Research Corporation of America.

chance of seeing the debate [fourth debate] on TV, or would you rather have seen something else instead?" In both the United States and Canada, more than two-thirds (in California 83 percent) of those who saw the debates responded positively (3, 4, 25). Indeed, the positive response increased from debate to debate. Women were consistently more positive than men, and the largest proportion who thought it was a bad idea, interestingly, favored Nixon (25).

It may well be that the explanation for the greater approval given each successive debate is a product of self-selection and the resultant increase in sophistication and political involvement of the audience. At any rate, this is the suggestion implicit in the Canadian findings, which establish that the *smaller* the audience, and the more *selective* the audience, the more it will be likely to approve. Thus Calgary and Vancouver attracted proportionately fewer listeners than the eastern cities (and Calgary, as has already been stated, had an alternative program available), but these two western cities had the highest vote of appreciation for the program (4). Incidentally, 60 to 70 percent of English-speaking Canadians in the seven cities surveyed felt that the debate format should be employed in Canadian politics.

More indirect indices of interests are reflected in the extent to which the debates were discussed or read about by those who listened. Deutschmann (7) found that 77 percent of those who saw the debates sought additional information about them. Only four or five news events have had comparable audiences in the past few years (25). About half the population discussed the debates within twenty-four hours and, although this is less than the number who discussed such things as Khrushchev's visits in 1959 and 1960, or Eisenhower's stroke, or the Russian and U.S. conquests of space, or even the Little Rock episode, it is an important high point in political discussion (7, 25).

Inquiring more specifically into what people liked and disliked about the debates, Carter (5) found that the clash of personalities was what seemed to be most attractive. Thus, the

later debates were liked better because they were considered more "direct, lively, emotional, peppy, spirited."¹² Similarly, in the analysis of the high points in the reactions (recorded by machine) of viewers assembled especially to watch the first debate, the Gallup poll's Hopewell study (9B) found that generalized "inspirational" material (Kennedy: "If we fail, then freedom fails;" Nixon: "A record is never something to stand on, it's something to build on") or effective counterattack (Nixon: "It is very difficult to blame the four Republicans for the eight Democrats not getting something through that particular committee") far outscored the facts and statistics of gross national product, etc.¹³ There is no doubt that the immediate response, at any rate, was to the drama of the combat and to the rhetoric. Fifty-four percent of the Schwerin respondents (23) considered the first debate "a considerable improvement" when asked to compare it "with other political speeches on TV." When asked to compare it "with other political programs of the panel or interview type," 37 percent said "considerable improvement" and 40 percent "some improvement."

Just as the audience responded to the rhetoric more than to the statistics, so they responded to the personalities more than to the issues. And many were quite aware of that fact. Asked which were better portrayed, issues or candidates, 19 percent of Carter's respondents (5) said the candidates; only 7 percent

¹² Kennedy voters liked the first two debates better than Nixon voters and the opposite was true for the last two. The obvious explanation for this is below.

¹³ The machine graphically records "like" and "dislike" on a moving tape. Given the conceptual limitations of the machine, it is no surprise that the more stirring parts of the exchange scored most positively. It should be pointed out, however, that the facts and figures scored high on "dislike." The Schwerin organization conducted a similar "program analyzer" study during the Korean War, recording audience reactions to a speech by President Truman. "Liking" responses rose during appeals to patriotism, Americans' strength, etc., and dropped with references to sacrifice, higher taxes, etc. Another "program analyzer" study of a film of one of the debates, carried out at the University of North Carolina by Noel Keys and Alan K. Whiteleather (12), focused on party differences in the extent of approval or disapproval of the statements of each candidate. They found that Democratic students (N=13) allocated approval (of Kennedy) and disapproval (of Nixon) less extremely than the Republicans (N=14), though the mean differences were small.

said the issues; 50 percent said both. There is little doubt, from this study and others (4, 16), that the audience was busy analyzing the character of the contestants—their “presentations of self.” Indeed, several of the academic studies focused exclusively on “images” rather than “issues” as the proper subject for investigation.

There was a minority which did not like the debates. Most of these, as has already been pointed out, did so because they felt that their man had been bettered. Indeed, in anticipation of the first debate, there is some evidence that Kennedy supporters were preparing to discount the outcome of the debate on the ground that competitive performance in the debate is irrelevant to the office of the presidency (16).

Alone among the studies, Carter (5) asked how the debates might be improved. Surprisingly, some 70 percent were able to volunteer suggestions (and even considering that Carter's sample was a politically involved one, this seems like an extraordinary response). Of those who responded, 20 percent thought the debates should be longer; almost that many urged the elimination of the interviewer panel; a smaller number suggested that each debate be limited to only one topic; and there was a large variety of other suggestions.

Who Won?

In contrast to the paucity of specific questions concerning the format of the debates, it is surely revealing that so many of the studies asked, unabashedly, “Who won?”—or words to that effect.

Again, the studies are very consistent concerning the results (see Table 3). The first debate was clearly won by Kennedy. That is, a plurality of respondents in every one of the thirteen applicable studies reported this result. The second debate was very close. The third debate was won by Nixon. And the final debate, again, was very close. (Only the Schwerin study [23] disagrees that the second and fourth debates were inconclusive. In both cases, the New Yorkers in the Schwerin laboratories declare Kennedy the winner by large margins.) Overall, when the

TABLE 3. WHO WON?
(Percent of All Viewers^a)

STUDY	QUESTION	FIRST DEBATE		SECOND DEBATE		THIRD DEBATE		FOURTH DEBATE		ALL DEBATES	
		RMN	JFK	RMN	JFK	RMN	JFK	RMN	JFK	RMN	JFK
3	California Poll	“Made better impression”		24	35						
5	Carter	“Who benefited”								11	49
7	Deutschmann	“Won votes”		7	26						
9	Gallup Poll	“Better job”		23	43					30	42
11	Iowa Poll	“Gained most”		23 ^b	35 ^b					21	32
14	Kraft			31	40	42	41	39	34		
18	Minnesota Poll	“Gained the most”								17	51
21	Opinion Research Corp.	“Best job stating his case”		25	39	31	36	46	28	39	35
22	Roper	“Best job”								31	36
23	Schwerin	“Outscored”		23	39	28	44	42	39	27	52
25	Sindlinger	“Who won”		24	26	31	28	40	23	35	36
29	Texas Poll	“Best job”		26 ^b	46 ^b						
31	Wallace	“Better impression”								23	54

^a The difference between sum of totals and 100 represents “no choice.”

^b Question was asked following second debate and referred to first two debates.

question was asked about the debates as a whole (5, 9, 11, 14, 18, 22, 31), Kennedy was far ahead.

Table 4 provides some insight into the major basis upon which people decide who won. Examining results for the first debate only, several things are evident from the table. (a) With the exception of two local studies (7, 31), individuals with a party affiliation or with a specific voting intention declare their own candidate the winner more often than they choose the opposition candidate. (b) More Republicans and Nixon supporters choose Kennedy as the winner than Democrats and Kennedy supporters choose Nixon; this is true of every one of the studies. (c) More of the former than the latter insist that they cannot decide who won. In other words, there is a marked tendency to choose one's own candidate as the winner, though among the relatively small number who concede to the opposition (5 to 10 percent in the state and national polls), there is a greater proportion of Republicans and Nixon supporters. Republicans, too, are more likely than Democrats and Kennedy supporters to say that they have no choices. (d) Finally, note that the undecided—those who had not yet made up their minds between the candidates—choose Kennedy more often than Nixon, though most of them report no choice.

Most of the other factors which differentiate between those who thought that Kennedy won and those who thought that Nixon won (education, occupation, age, religion, etc.) are confounded with voting intention and, therefore, we shall not report them. Only sex (happily) tends to be relatively free of statistical contamination. As it turns out, Nixon's debate performance seems to have impressed proportionately more women than men (14, 18, 25).

Roper (22) asked those who named one or the other candidate as having won the final debate, "In what ways would you say that (Kennedy, Nixon) was better?" and the answers were cross-tabulated by voting intention. Three categories of reasons characterize the loyal partisans as compared with those who conceded defeat: they said that the winner was better, first of all, because they *agreed with his views*; second, because he was *better informed*; and, finally, because he was more *sincere*,

TABLE 4. "WHO WON" FIRST DEBATE: PERCENTAGE DISTRIBUTION OF CHOICE OF WINNER ACCORDING TO VOTING INTENTION OR PARTY AFFILIATION"
(each row equals 100%)

	STUDY	QUESTION	INTENTION OR AFFILIATION	WINNER		
				Nixon	Kennedy	No Choice ^b
3	California Poll	"Made better impression"	Republican	39	17	44
			Democratic	11	51	38
7	Deutschmann	"Won votes"	Republican	10	27	63
			Democratic	4	30	66
			Independent	4	19	67
9A	Gallup	"Better job"	Pro-Nixon	45	17	38
			Pro-Kennedy	3	71	26
			Undecided	12	26	62
11	Iowa Poll ^c	"Gained most"	Pro-Nixon	39	16	45
			Pro-Kennedy	3	62	35
			Undecided	8	30	62
14	Kraft ^c		Pro-Nixon	59	17	24
			Pro-Kennedy	7	65	28
			Undecided	25	31	44
21	Opinion Research Corp.	"Best job stating his case"	Pro-Nixon	52	8	40
			Pro-Kennedy	2	73	25
			Undecided	4	22	74
23	Schwerin	"Outscored"	Pro-Nixon	47	6	47
			Pro-Kennedy	4	79	17
			Undecided	7	39	54
31	Wallace	"Better impression"	Republican	28	46	26
			Democratic	2	87	11
			Independent	26	48	26

^a Information on voting intention and party affiliation was obtained during the same interview as evaluation of the debates. It is conceivable, therefore, that some people aligned their party affiliation or voting intention according to their evaluation of who won the debate. Although several studies have predebate information available, only the Kraft study actually employs voting intentions obtained in an earlier interview.

^b No Choice and/or Don't Know.

^c Question was asked following second debate and referred to first two debates.

honest, truthful, etc. Those who decided for Kennedy were much more likely than those who decided for Nixon to emphasize that their choice was *specific*, gave facts, answered questions directly rather than evasively. Comparing only the two (very small) groups of conceders, it appears that Nixon supporters who conceded that Kennedy had won did so primarily on personality grounds: they liked his personality, they said. And they concurred in his partisans' admiration for his specificity.¹⁴ Kennedy supporters who conceded that Nixon had won the debate were unique in attributing the victory to his having kept his opponent on the defensive, and they were much more likely than Nixon's own partisans to feel that he had displayed greater confidence in presenting his position.

Although there are various ways in which the many categories of response classified by Roper might be combined and recombined, it seems that a candidate's general informedness and his style of presentation of facts and arguments were more important criteria for judgment than either what he said or his personality as a whole. In other words, if these attributes are separable at all, the Roper data seem to argue that style of presentation was more important than either the content of the presentation (issues) or the personality of the debater (image).¹⁵ This is in contrast to those who have speculated that the audience was interested only in the personalities of the candidates.

The Canadian study (4) feels that *both* personality and style of presentation were important frames of reference and agrees

¹⁴ Still, pro-Kennedy people and those who leaned toward Nixon (but not those "for" or "strongly for" Nixon) apparently would have liked Kennedy to be even more specific. Asked by Market Psychology, Inc. (17), to complete the sentence, "I would like Kennedy a little more if he would only . . .," large proportions of these groups (in New Brunswick, N.J.) said, "If he would only be more specific," especially about details of his foreign policy. Sizable proportions of the same groups said he should be "less rash, less double-talking, more mature, time his phrases, speak more slowly and more clearly, speak right to us, not end so abruptly, show the sense of the presidency as an awful trust rather than merely a political goal, etc."

¹⁵ The Kraus-Smith paper (15) finds the "images" attributed to each candidate closer to the "images" of some issues than of others. E.g., it is suggested that the "profile" of the Democratic image of Kennedy matches the "profile" of Catholicism, federal aid to education, and the UN.

that the subject matter of the debate—the issues—was rarely mentioned as a factor which “counted in favor of” or “counted against” each candidate. Thus, “the questions we asked here were carefully worded so as to allow respondents to talk either about what the candidates said or about the two men themselves and how they performed. . . . The fact that so little comment was directed at the subject matter of the debate or at any of the arguments involved, and so much more at the candidates themselves and the general quality of their respective performances as debaters, would seem to confirm what some commentators have already suggested. This is that a television debate of this kind, which focuses attention so sharply on the contestants themselves, leaves a mass audience with (as we have seen) some very distinct impressions of the capabilities of the two men as debaters and as persons, but (as our results suggest) with very little idea of what the debate was all about” (4).

Learning from the Debates: The Issues

That does not mean that people learned nothing from the debates about the issues. Indeed, Carter (5) gave a sixteen-item information test to his respondents based on statements made by the candidates in the first debate and found not only that at least some of what was said was remembered, but, even more, that there was no evidence that a process of “selective recall” was operating. That is to say, Democratic viewers were no more likely to recognize statements made by Kennedy than statements made by Nixon, and the same thing holds true for Republican viewers. This is an extraordinary finding, suggesting that the debates not only overcame the well-established tendency toward selective exposure (which insulates one from opposition arguments) but also—at least as far as information is concerned—the tendency to perceive and recall selectively.

A related study by Sebald (24) also finds respondents—sociology students at Ohio State, in this case—equally able to identify correctly statements made by either candidate (regardless of their own preferences). Sebald’s concern, however, was rather different from Carter’s (5). Respondents were presented

with a set of statements made by the two candidates and were asked, first, to agree or disagree with each statement and, second, to name its author. While the overall attribution of statements to the two candidates was equally correct, statements with which a respondent disagreed were most often attributed to the opposition candidate—even when actually made by the respondent's own candidate—while statements with which the respondent agreed were much more accurately attributed to the candidate who made them. This implies that it may be more painful to disagree with one's own candidate than to agree with some statement of the opposition. In still another aspect of the same study, respondents were asked to recall spontaneously statements made by the candidates. Here, the students tended to recall those of their own candidate's statements with which they personally agreed and statements of the opposition candidate with which they disagreed.¹⁶ It is not clear, however, whether the students' opinions on the issues preceded or followed exposure to the candidates.

Of course, there is plenty of other evidence to illustrate the workings of selective perception in audience reaction to the debates. The distribution of votes on "who won" according to voting intention or political affiliation (Table 4) provides an obvious example; and there are many others. An especially pertinent example is reported by Kraft (14), who finds that those who say that the most important thing discussed in the (second) debate was foreign policy were much more likely to be pro-Nixon than pro-Kennedy, whereas those who say that some domestic matter was the most important topic discussed tended to be for Kennedy.

The evidence (21, 25) suggests that foreign affairs was the paramount issue during the entire campaign and, according to Sindlinger (25), it increased in importance following the second, third, and fourth debates. Since Nixon was generally conceded to be the more expert and experienced in foreign affairs—he was far ahead of Kennedy in perceived ability at "handling the Russians" and "keeping the peace" (9A, 21, 22)—the

¹⁶ This line of analysis is developed in Berelson, Lazarsfeld, and McPhee, *Voting*, Ch. 10.

focus on foreign affairs was clearly to Nixon's advantage. In the debates themselves, the Quemoy-Matsu issue seemed to work for Nixon. Roper (22) asked specifically, "How do you feel about this—that Nixon scored against Kennedy in these discussions about the offshore islands of Quemoy and Matsu . . . or that Kennedy scored against Nixon or that neither one of them handled this issue well?" While partisans said that their own candidate had outscored the other, the Nixon supporters were surer of this than were the Kennedy supporters. Similarly, in Carter's study (5), California Republicans were much surer than Democrats that their man got "the best of the argument" over issues such as "peace," "Cuba," "U-2 flights," and "disarmament."¹⁷ Public perception of Kennedy's ability in foreign affairs did increase as a result of the debates (3, 18, 22) but, even so, Nixon might well have won, if perceived ability at handling foreign affairs had influenced more votes.

There seems to be little doubt that the debates made some issues more salient, as all campaigns do. Quemoy and Matsu (from which Nixon profited), U.S. prestige (which benefited Kennedy [5]), and domestic issues such as unemployment, old-age medical insurance, aid to education, and farm policy (all of which benefited Kennedy [5, 21]) were the major ones. But the Kraus-Smith study (15), which investigated the extent of actual changes in opinion on the issues as a result of the debates, found no change at all, while the Carter study (5) found higher proportions insisting, on most issues, that neither candidate had gotten "the best of the argument."

Still, it is worth bearing in mind that people seemed to remember some of the content of the debates. Moreover, when asked, 27 percent of the respondents in one study (5) assert that the debates helped them learn something about the issues, and this is not far from the percentage that say they learned something about the candidates (35 percent) or that the debates generally increased the level of their information and interest in the campaign (17 percent).

As far as issues are concerned, then, the debates seem to have

¹⁷ Citations to Carter (5) in this and the following paragraph are based on material omitted from Carter's chapter in this book.

(a) made some issues salient rather than others (the issues made salient, of course, may or may not have been the most "important" ones); (b) caused some people to learn where the candidates stand (including the stand of the opposition candidate); (c) effected very few changes of opinion on the issues; and (d) focused more on presentation and personality than on issues.

Learning from the Debates: The Candidates

Sixty-one percent of the Kennedy voters said they learned "a great deal . . . about the candidates and what they stand for" from the TV debates (21). Only about half as many said they learned "a great deal" from other TV appearances of the candidates, from news in the newspapers, from columnists or editorials. The Nixon voters are more grudging about the debates—since their outcome is so clearly associated with the victorious Kennedy. Still, 35 percent of the Nixon voters say they learned a "great deal"—as large a percentage as for any other source of information.

We have already seen that viewers learned something about the issues, though perhaps not very much. But there is considerably more reason to believe that they learned something about the candidates themselves. They discovered how well each candidate could perform in a debate and they formed images of each candidate's character and abilities.

Many will argue that this is unfortunate learning in the sense that whether a candidate is perceived as sincere, or tough, or quick on his feet is, first of all, probably not an important qualification for the office of president and, second, probably misperceived anyway. (Some would say similar things about the issues as they were presented in the debates.) But is it altogether unfortunate? Is it irrational to assume that the observation of two men interacting (albeit with many restrictions) under extreme pressure may be somewhat diagnostic of performance in a high-pressure job? Is the candidates' manner of handling rhetoric or statistics really so remote from the American voter's task of evaluating the qualifications of the man, as much as of the party, for the presidency? It is certainly much more ra-

tional than judging an automobile by its body or a book by its cover, but—as some sympathetic soul has pointed out—even these actions may not be as demented as they seem. People are not so foolish as to equate an automobile with the design of its body but, when mechanical sophistication is lacking, they use the body, and whatever other clues are available to them, as indices of the quality of the car.

Whatever the case, there is evidence from several studies (3, 5, 16, 28) that Kennedy fared far better than Nixon as far as positive images are concerned. Of course, Kennedy had the “advantage” of being all but unknown. Nixon had to maintain his image; Kennedy had to attain his—and the latter (or so it seems after the event) is the easier thing to do.

The most elaborate of the several image studies is that of Tannenbaum (28), in which respondents are asked to choose the attributes of their ideal president in terms of a set of scales such as weak-strong, agitated-calm, old-young, and the like, and then—before and after the first debate and, once more, following the last debate—they were asked to rate the two candidates in terms of the same scales. The first debate moved the ratings of Kennedy, on all twelve scales, in the direction of the ideal president, the most important shift being on “experienced-inexperienced.” Changes in the before and after ratings of Nixon seemed random and inconsistent by comparison. Both men moved away from ideal by the end of the debates but Nixon moved away more decisively than did Kennedy. Tannenbaum concludes that “Kennedy did not necessarily win the debates, but Nixon lost them. . . .”

Both Tannenbaum (28) and Carter (5) find that Kennedy’s performance in the first debate impressed Democrats and Republicans alike as far as positive images are concerned. Over the entire period of debates, the Carter findings (5) indicate that the Democrats boosted Kennedy higher and higher while the Republicans’ appreciation of Kennedy increased almost as much. Nixon barely maintained his original position. Two studies of university students (12, 13) identified a decline in the favorability of the Nixon image among pro-Kennedy people as the major change and one of the studies (13) found a correspond-

ing improvement in the image of Kennedy among pro-Nixonites.

Not so in Chicago, however. Creative Research Associates (6) found that Nixon's image improved even more than Kennedy's in the second, third, and fourth debates and that Nixon lost ground not so much in the debates but outside them ("between" them).

But this is the only exception and, in any case, CRA (6) does not discuss the first debate, which, apparently, made most of the difference. The first debate seems to have served primarily to rally the doubting Democrats. A respondent in the Langs' study (16) is quoted as saying that, as a result of the first debate, he "switched from being an anti-Nixon Democrat to a pro-Kennedy Democrat." According to the Langs, many Democrats expected Kennedy to do less well and, in anticipation, were prepared to discount the connection between performance in the debates and qualification for the role of president. Kennedy's victory not only strengthened confidence in him among partisans and potential partisans but, by making the performance criterion universally legitimate, made the institution of the debates more important than they otherwise might have been and the defeat of Nixon all the more serious (16).¹⁸

These changes in the image of Kennedy surely account for the increase in the overall favorability toward Kennedy over the period of the debates. Five studies inquire specifically into the generalized attitudes of voters toward the two candidates, and the results are summarized in Table 5. Just as in the evaluation of "who won," it is evident from the table that (a) the

¹⁸ An analysis of the Tannenbaum data (28) subsequent to the one reported in the present volume tends to confirm the notion that the first debate was especially influential for Democrats and Independents. Of particular interest here is the marked improvement in the eyes of Democrats and Independents in Kennedy's position relative to Nixon's with respect to such traits as "experience" and "strength." While Kennedy's image as a "TV performer" showed particular improvement with respect to these traits, there was also improvement in the corresponding components of his "presidential" image. The results are reported in Bradley S. Greenberg, "The Political Candidate versus the Television Performer," a paper read at the annual meeting of the Pacific Chapter, American Association for Public Opinion Research, Los Angeles, January, 1962.

TABLE 5. IMPACT OF DEBATES ON FAVORABILITY TOWARD CANDIDATES ACCORDING TO POLITICAL PREDISPOSITIONS
(VIEWERS ONLY)

Note: Read this table as follows: Considering the California Poll, for example, 33% of Republican viewers became more favorable to Nixon, 8% less favorable, and (not shown in the table) 59% remained unchanged. Among Democratic viewers, 15% became more favorable toward Nixon, 33% less favorable, and (not shown in the table) 52% remained unchanged.

STUDY	QUESTION		% MORE FAVORABLE			% LESS FAVORABLE		
			Rep	Dem	Ind	Rep	Dem	Ind
3 California Poll (first debate)	"Did seeing the debate make you more favorable or less favorable toward Nixon? Toward Kennedy?"	Toward Nixon	33	15		8	33	
		Toward Kennedy	25	54		19	4	
5 Carter (after four debates)	"Did your feelings about either candidate change in any way as a result of the television debates? In what way?"	Toward Nixon	25	14		17	29	
		Toward Kennedy	19	39		32	16	

18	Minnesota Poll (after three debates)	“Has your opinion of Kennedy (Nixon) changed in any way as a result of the debates? In what way?”	Toward Nixon	29	13	20	2	12	8
			Toward Kennedy	6	23	19	17	2	11
23	Schwerin ^a (first debate)	“Having seen this debate, what is your attitude toward Vice-President Nixon? Toward Senator Kennedy?”	Toward Nixon	57	13	16	2	31	11
			Toward Kennedy	25	72	36	14	6	2
27	Survey Research Center ^b (after four debates)	“Was your feeling about (Kennedy) (Nixon) any different after you watched those programs?”	Toward Nixon (against Kennedy)	40	11	17			
			Toward Kennedy (against Nixon)	19	56	40			
			Neither	41	33	43			

^a In the Schwerin study, political predisposition was indexed by preference for candidates rather than for party.

^b Whereas the other studies percentaged changes in favorability separately for each candidate, the SRC study combined pro-Kennedy and anti-Nixon changes and pro-Nixon and anti-Kennedy changes and percentaged these over the total viewers of each party.

Democrats reported that their opinion of Kennedy had improved more often than Republicans reported an improvement in their general opinion of Nixon; (b) Republicans became more favorable to Kennedy than Democrats to Nixon; (c) indeed, two of the studies (3, 23) suggest that the Democrats became much more unfavorable to Nixon following the first debate than the Republicans did to Kennedy; (d) Independents (23, 27) moved more toward Kennedy than Nixon. Important as these figures are, however, it is no less important to note that close to half of the respondents in each of these studies reported no change at all.

Impact of the Debates on Voting Decisions

But did this affect any votes? That is a hard question to answer.

Ideally, to test for the impact of a given debate on voting intentions it would be necessary (a) to have before and after measures of the voting intentions of the same group of respondents; (b) to compare viewers and nonviewers. And, in order to assess the impact on actual voting, it would be necessary (c) to establish that a change in voting intention resulting from exposure to the debate had persisted until election day.

But this is very elusive information. Most studies are not based on panels of the same respondents (trend studies, of course, reveal only changes in the total distributions and conceal internal changes). Furthermore, even a panel study cannot focus so narrowly on the debates as to be sure that it was a debate rather than some other campaign event which best explains changes in voting intention. Then, too, it is almost impossible to compare viewers and nonviewers since these were somewhat different kinds of people to begin with and, what's more, nonviewers got the word so quickly. For example, Deutschmann (7) finds a certain amount of change presumably as a result of the first debate but no difference between viewers and nonviewers.

Bearing all these limitations in mind, let us look at the evidence.

First of all, it seems safe to say that the debates—especially the first one—resulted primarily in a strengthening of commitment to one's own party and candidate. This was much more the case for Democrats than Republicans, but the former had much greater room for improvement. Thus, according to ORC (21), the 63 percent of Republicans who were "strongly committed" to Nixon in August dropped upon reinterview following the first debate to 59 percent, whereas the percentage of Democrats "strongly committed" to Kennedy increased from 39 to 46. Similarly, the Langs (16) found that most of the changes following the first debate were those of undecided Democratic party sympathizers whose votes had "crystallized" as a result of the debates.

Second, trend data on changes in strength of commitment from debate to debate follow the pattern of evaluation of "who won." Consider Table 6, based, again, on the ORC study (21). In the two debates with a clear-cut winner (first and third), there is an increase in strength of commitment to the winner and a decrease in commitment to the loser. Between the first and second debates (the second being a tie) both candidates gained strength equally. The fourth debate (also a tie) fits the

TABLE 6. CHANGE IN COMMITMENT FROM DEBATE TO DEBATE^a

DEBATE	WINNER	% CHANGE IN "STRONG COMMITMENT" TO OWN PARTY'S CANDIDATE	
		Republicans	Democrats
First	Kennedy	-4	+7
Second	Tie	+9	+8
Third	Nixon	+7	-1
Fourth	Tie	-4	+2
	Net Change	+8	+16

^a Adapted from ORC study (21). Note that successive interviews are with different subsamples of original August sample of respondents, nationwide, and thus the changes reported are essentially "trend" data rather than "panel" data.

pattern somewhat less well, though the net gain for Kennedy results from Nixon's loss of Republican strength-of-commitment rather than an increase in commitment among Democrats.

Finally, still drawing on the same study, Table 7 compares the pre- and post-debate positions (on a nine-point scale) of viewers and nonviewers.¹⁹ The first thing to note in the table is that viewers of the debates, if anything, changed *less* than nonviewers. This is not as surprising as it sounds considering the fact that the nonviewers were far less interested in the election and far less committed to a candidate than the viewers. Previous election studies have shown that these are the people who are most open to influence, who are least likely to vote, and whose responses, in any case, are of dubious reliability. The second important point to note in the table is that among those who did change their voting intentions, by and large, neither candidate gained; this is true for both viewers and nonviewers of the final three debates. *Only in the first debate* is there evidence that viewing made a difference for one of the candidates. The net gain for Kennedy among viewers of the first debate is 8 percent, compared with the usual negligible difference (2 percent) among the nonviewers.²⁰

As previously noted, Deutschmann's (7) report is rather similar. He found no difference in the extent of change among viewers and nonviewers of the first debate. He also found that 25 percent of his panel made a change (on a seven-point scale) before and after the first debate, of whom 11 percent crossed over from one candidate to the other. Kennedy profited slightly more than Nixon from the net result of these moves. Again, the Creative Research study (6) found that nonviewers changed at least as much as viewers of the second, third, and fourth debates. There is a whisper of a suggestion that there was more

¹⁹ These data are based on before and after comparisons of the *same* respondents. There are four sets of comparisons, one for each debate. Any movement on the scale (e.g., from "leaners" toward Kennedy to "strongly committed" to Kennedy) is classified as a change—in this case, of course, a pro-Kennedy change.

²⁰ The absence of a clear-cut net gain for Nixon among viewers of the third debate conflicts with Table 6. It is difficult to reconcile these two sets of data.

TABLE 7. CHANGES IN COMMITMENT OF VIEWERS AND NONVIEWERS^a

	FIRST DEBATE		SECOND DEBATE		THIRD DEBATE		FOURTH DEBATE	
	Viewers %	Non- viewers %	Viewers %	Non- viewers %	Viewers %	Non- viewers %	Viewers %	Non- viewers %
Unchanged	58	52	65	66	73	69	70	67
Change to Kennedy	25	25	17	17	14	15	16	16
Change to Nixon	17	23	18	17	13	16	14	17
Net gain for Kennedy	+8	+2	-1	0	+1	-1	+2	-1

^a Based on special tabulations by ORC (21) of before-and-after interviews with the *same* individuals. Before and after the first debate, for example, 58% of the viewers indicated precisely the same commitment (on a 9-point scale), while 25% made a change in Kennedy's favor (e.g., from "leaning" to "strongly committed") and 17% changed in favor of Nixon.

movement from undecided to a specific voting intention among the viewers than among the nonviewers.²¹

From these studies (7, 16, 21) it appears a reasonable inference that the debates did have some effect or, more exactly, that at least the first debate accelerated Democratic support for Kennedy among viewers.

To put these findings in a somewhat different perspective, however, it is instructive to consider the long-term trend within which the above-mentioned changes were going on. Consider Table 8, in which the trend results of the Gallup Poll (9A) are reported for the entire campaign. The results reported on September 25 were obtained immediately before the first debate and the interviewing for the report of October 12 was con-

TABLE 8. THE GALLUP POLL (9A)^a (each row equals 100%)

Release Date	Kennedy-Johnson	Nixon-Lodge	Undecided
August 17	44	50	6
August 31	47	47	6
September 14	48	47	5
September 25 ^b	46	47	7
October 12 ^c	49	46	5
October 26	48	48	4
November 4 (adjusted for probable voters)	51	45	4
November 7	49	48	3
Actual vote	50.1	49.9	

^a "If the election were held today, which ticket would you vote for — Nixon and Lodge or Kennedy and Johnson?" Results reported above include those registered and intending to vote who were more or less certain of their choice. Note further adjustment of November 4.

^b Before first debate.

^c After first debate.

²¹ The ORC (21) and Deutschmann (7) data just presented were analyzed as "panel" data, comparing the response each individual gave before the debate with very different results. The question is, "What do you think were the most the same respondents before and after each debate but presented only the overall marginal distributions at each point in time and therefore could measure only the "net change."

ducted immediately after the first debate, during the period September 27–October 4. Here, too, it appears that Kennedy scored a net gain in the debates, advancing three percentage points while Nixon lost one. But consider the long-term trend, which suggests that Kennedy was gradually advancing anyway!

Did the debates really affect the final outcome? Apart from strengthening Democratic convictions about their candidate, it is very difficult to say conclusively.

But if you *ask* people whether the debates influenced their voting decision, they say yes. As Table 9 reveals, a sizable proportion of the voting population feels that the debates helped them decide. This is more true for Democrats than for Republicans, as has already been pointed out.²² But consider the 6 percent in the national Roper study (22) who say that the debates “made them decide” or the 39 percent in the Bruskin study (2) who mention the debates in answer to a very different question concerning “the one most important thing” that led to Kennedy’s victory.²³ Even these people, almost certainly, were reinforced by the debates in their prior inclinations rather than converted. On the other hand, who is to say that the doubts and reservations which existed among Democrats regarding Kennedy might not have been dispelled at all if it had not been for the debates?

²² A study of University of Washington students by Edelstein (8) finds 5 to 6 percent who consider the debates the “most important” factor in their decisions and some 35 percent who feel that the debates were at least “fairly important.” There is little, if any, support here, however, for the finding of other studies that the debates were considered more important by Democrats than by Republicans.

²³ ORC (21) asked a question only slightly different from Bruskin’s (2) but with very different results. The question is, “What do you think were the most important issues or factors in deciding who won the election?” Only 8 percent mentioned the debates, while 18 percent mentioned religion, 12 percent mentioned labor vote, 10 percent mentioned personality, and, in addition, a large number of specific issues were named. A phenomenon similar to the difference between the Roper (22) and Bruskin (2) results noted in the text has been often observed in survey research. In studies of medical care, for instance, very few people ever attribute their *own* failure to have an illness attended by a physician to a fear of the diagnosis, while a large proportion of the same people ascribe this motive to “most people.”

TABLE 9. PERCEIVED ROLE OF DEBATES IN DECISION-MAKING PROCESS ACCORDING TO VOTING INTENTION^a

Study	Question	Answer	Pro-Nixon %	Pro-Kennedy %	Undecided %	Total %
11 Iowa Poll ^b (after two debates)	“Do you feel that these television debates between Nixon and Kennedy have helped YOU DECIDE which candidate you will vote for or haven’t the debates made any difference?”	Yes, helped decide	28	42	34	34
		No, no difference	70	57	64	64
		Don’t know	2	1	2	2
			<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
22 Roper (after four debates)	“Different people have said the debates did different things for them. Some say the debates made them <i>decide</i> who they’ll vote for; some say they made them <i>more sure</i> their choice was right; some say they left them <i>less sure</i> , and others say the debates had practically no effect on them one way or the other. Which is <i>most</i> true for you?”	Made them decide	3	9	1	6
		Made them more sure	39	49	4	41
		Made them less sure	5	3	24	5
		No effect	49	35	52	43
		Don’t know	4	4	19	5
			<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

^a Percent of pro-Nixon, pro-Kennedy, Undecided, and all respondents.

^b The Iowa Poll also reports on results of a similar question asked after all four debates were over: helped, 29%; no difference, 63%; don’t know, 8%. No breakdown is given according to voting intention. Note the decline in the proportion claiming that they were helped in their decisions.

Some Implications for Further Research

So much by way of summarizing and integrating the results of social research on the Kennedy-Nixon debates. In conclusion, we want to venture some additional thoughts on the conduct of both the research and the debates. Under the heading of research, we want to respond to a variety of procedures, findings, and interpretations that, explicitly or implicitly, bear on theoretical and methodological issues current in social science. Under the heading of the debates, we want to draw some implications from these studies for policy governing possible future public encounters between presidential candidates.

Most of these studies, it must be borne in mind, were designed almost accidentally as a by-product of continuing reports on campaign developments. All were designed in a hurry. The remarks that follow, therefore, are not meant primarily as negative criticism, but rather as guidelines for future research. Indeed, for anybody who might want to take the trouble, it is worth mentioning that many of the studies reported here have storehouses of unanalyzed data, the analysis of which would contribute substantially to illuminating those questions which have had to be left unanswered. What follows, in effect, is a series of suggestions which, we hope, may contribute to doing even better next time.

The Panel Method and Voting Intention. Although a number of studies employed the panel method of repeated interviewing, little use was actually made of panel-type analysis. In other words, the responses obtained from an individual at one point in time were seldom cross-classified against the responses he gave at an earlier time. Instead, the data are presented as if they were obtained from different people at each point in time.

The loss of information which results from this procedure is best illustrated, perhaps, by the fact that, according to the Gallup Poll (9A), the net increase in the pro-Kennedy vote was only 5 percent while the pro-Nixon votes fluctuated only a few percentage points during the course of the entire campaign. At the same time, we know from several of the panel studies (7,

14, 21, 27) that during the course of the campaign as many as 20 to 25 percent of the electorate changed in some way: from decided to undecided (or the reverse) in strength of commitment to a candidate; or, to a smaller extent, from one candidate to the other. Similarly, the gross change connected with any one of the debates must have been far larger than the net change.

The Panel Method and Images. The panel method is applicable not only to voting intentions but, perhaps even more, to the study of images which figures so prominently in a number of the reports. The image studies, however, tend to present only overall "profiles" before and after exposure. While the group of respondents is the same on both occasions—therefore decreasing the sampling error as compared to what it would be if two separate groups were interviewed—the real potential of the panel design is rarely realized. For example, just as in the case of voting intentions, one can ask whether the absence of net change between the two time periods means that no individuals were changing or, perhaps, that a large number of people changed but in a mutually compensating manner. By the same token, where change does occur on a number of different image dimensions (e.g., hot-cold, active-passive, etc.), it seems important to find out whether a few people have made changes on many scales while most have remained unchanged or whether a large number of people have changed on only a few scales each. If the former, not many votes could be affected; if the latter, many votes might be involved. Then, too, one would want to know whether an individual whose image of a candidate becomes more favorable on one scale also tends, rather indiscriminately, to move in a more favorable direction on the other scales or whether there are certain psychological "associations" which lead to greater unfavorability on some scales as a consequence of improved favorability on others. Isn't it possible—to invent an example—that a perceived favorable change on a "smart-stupid" dimension might be accompanied by a negative change on a "modest-conceited" dimension, and so on? Again, we would want to know whether an individual who moved Kennedy toward the "experienced" pole was in-

duced thereby to move Nixon in the other direction. And so on.

The Consonance of Images and Intentions. Indeed, one of the real possibilities of a panel analysis of images would be an assessment of the extent to which changes in the image of one candidate can occur apart from changes in the image of the other and, in general, whether images can change independently of voting intentions. This opens onto the whole area of analysis of cognitive balance which is so much in the forefront of current social-psychological research.²⁴ The generic problem is: how can people keep on smoking and believe, at the same time, that cigarettes are a probable cause of lung cancer? Of course, it is a lot easier for somebody who continues firm in his commitment to Nixon to admit that Kennedy has some of the qualities which he feels are appropriate to an Ideal President (28) than it is for somebody who is strongly committed to smoking to admit that cigarettes cause cancer. Still, research on the relationship between images and commitments in election campaigns offers a real opportunity to explore the various patterns of coping with such "contradictions." For example, we know from Sebald (24) that it is apparently more comfortable to *agree* with the opposition candidate than to *disagree* with one's own. Can images be changed radically without any corresponding change in voting intentions? How do people isolate one from the other, if they do?

Other Aspects of Cognitive Balance. One way to reduce the dissonance, of course, is to avoid perceiving the contradictory evidence—to miss the point, or deny the validity, of the anti-smoking propaganda. The data on "who won" (Table 3) provide a good illustration of the much-studied mechanism of perceiving selectively so as to avoid upsetting prior commitments and loyalties to self and to others. The fact that the Democrats rather than the Republicans claimed to have learned "a great deal" from the debates (21), or that the Protestant Democrats

²⁴ See, for example, Leon Festinger, *A Theory of Cognitive Dissonance* (Evanston, Ill.: Row, Peterson, 1957); the Summer, 1960, issue of the *Public Opinion Quarterly*; Fritz Heider, *The Psychology of Interpersonal Relations* (New York: John Wiley and Sons, 1958), Ch. 7.

tended to avoid the debates (7), or that Nixon supporters hardly mention foreign policy as a factor in the Kennedy victory (21) are further illustrations of the ways in which individuals manage their perceptions and cognitions and memories so as to hold things together in as neat and consistent a package as they can. Equally interesting in this connection is the anticipatory discounting of the debates on the part of fearful Democrats as reported by the Langs (16). Most intriguing of all is the Carter (5) finding that, at least for the first debate, retention was *not* selective on the basis of party affiliation or predisposition.

Images and Role Expectations. Returning to image research, it is evident that this is one of the most interesting aspects of these studies. And much more can be done on political images, it seems to us, in addition to panel analysis. For example, wouldn't it be interesting to know what kinds of performances stimulate what kinds of images in what kinds of people? The fact that proportionately more women than men responded positively to Nixon's debate performance (14, 18, 25) provides a good illustration: were the women "seeing" the same things as their husbands but reacting to them differently or were they "seeing" different things? One might ask many questions of this sort: why didn't Nixon's first-debate performance universally suggest contemplativeness and profundity the way it did for some people (16), rather than suggesting uneasiness and slow-wittedness? And wouldn't it have been interesting to know not only the attributes that different kinds of people want to see in an ideal president (28), but also the relationship between these attributes and those which they value in other roles? More, wouldn't it be interesting to know whether the attributes of the ideal president for a given type of individual more closely match the attributes ascribed to, say, a performer rather than a father or a foreman rather than a friend, etc.? Referring again to the male-female difference noted above, one might speculate that women want a president who is more like a father than a lover.²⁵

²⁵ The Tannenbaum study (28), whose respondents were primarily women, finds Kennedy much closer to the "virility" pole than Nixon. Nixon was more

The "Uses" of Mass Communications. This brings to mind a current concern in communication research with the "uses" to which people put the media. Very little attention is given in these studies to the ways in which the debates as a form, as distinct from the personalities of the candidates, were perceived. After all, TV is a medium of entertainment; it is far less often thought of or employed as a medium of serious information. How did the debates fit into this context—or was their effect so powerful that they were able to change the image of TV itself? Did people who thought that the candidates had been tipped off in advance (and there seem to have been such) think of wrestling matches? Or quiz shows? Was this entertainment or education or politics or what?

And how did people actually "use" the debates in their daily lives? We know that they talked about them; we know that they read about them (25). But what aspects of the debates did they find discussable? And with whom did they talk? Their spouses? Their children? The men at the office or the shop? These are really important matters, it seems to us. We wonder, for example, whether people still think that their child might become president of the United States and whether the debates offered any clues as to how to achieve this. And how did people who watched with their children explain what was going on?

Similarly, we wonder whether there was any amount of identification with the candidates (as there is with contestants on quiz programs): "How would I answer that question if I were running for president?" Did people bet on the outcome of the debates in an office pool? Who were the people who spent the next day explaining to others what had really gone on? Which people would rather have seen the debates than their favorite programs (or vice versa) and why?

The Two-Step Flow of Communications. A current hypothesis suggests that individual decisions are influenced less often by direct exposure to the mass media than to the opinions of other people. The theory holds that the individuals who are in-

"experienced," "older," more "conservative," etc. We do not know from this study whether the women who rated Kennedy higher on "virility" were more or less likely to vote for him.

fluent for others are more likely to be exposed to relevant mass media than are the people whom they influence.²⁶

Several studies (7, 21) address themselves to this hypothesis, claiming in the present instance that (a) when the media are so pervasive there is little room for interpersonal transmission; (b) when voting intentions changed—predominantly among those with low interest and low “initiative”—they probably changed in direct response to the media rather than as a result of interpersonal influence.²⁷ Indeed, Deutschmann (7) suggests that talking to others *reduced* the likelihood of change as a result of exposure to the debates.

These ideas pose interesting questions for the theory. Without going deeply into the matter, one cannot omit notice that viewing of the debates was a group (at least a household) affair (5) and, furthermore, that talking to somebody of *opposite* political persuasion did, apparently, change voting intention (7). Most people talked to others who agreed with them, of course, and such talk is at least as likely to be strongly reinforcing as talking with a member of the opposition is likely to be an influence toward change.²⁸

Microscopic vs. Macroscopic Research. The present review affords an opportunity to compare the results of the intensive small-scale study with those of the large high-powered survey organization. The former are said to excel in theoretically relevant concerns even though their sampling and other methodological refinements must necessarily be inadequate; the latter are said to be technically proficient but lacking in imagination.

²⁶ For the original statement of this hypothesis in connection with voting, see Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet, *The People's Choice* (New York: Columbia University Press, 1948), Ch. 16. Subsequent work is reviewed in Elihu Katz, “The Two-Step Flow of Communication: An Up-to-Date Report on an Hypothesis,” *Public Opinion Quarterly* 21 (1957): 61-78.

²⁷ See Joseph R. Goeke, “Two-Step Flow of Communication: The Theory Re-Examined,” a paper presented at the sixteenth annual conference on public opinion research of the American Association for Public Opinion Research, 1961, and based on the Opinion Research Corporation study (21).

²⁸ The Edelstein study (8) finds that a positive relationship exists between the number of debates viewed and the tendency to talk about them with like-minded people. This implies that people with higher interest in something are more likely to talk with people who share their views.

Judging from the present instance, we cannot completely agree. It is true that most of the small-scale studies draw certain theoretical implications from their findings and that many of the large studies are rather more descriptive. But the best of the large-scale studies compete, in imagination and theoretical interest, with the best of the small-scale studies. Far from piously calling for merging the best of both worlds, it seems far more important to urge that the traditional division of labor be taken even more seriously. The smaller studies might well be more daring conceptually.

Isolation. The fact that so few of the researchers knew of each other's activities is a curiously interesting phenomenon. There is some merit in such "independent" findings, of course. In general, however, there does seem to be some need for more interchange, in order to standardize where appropriate and diversify where appropriate.

Some Political and Policy Implications

Turning from considerations of method and theory as they bear on social psychology and communications behavior in general, we want to close with several thoughts about the more specific political implications of the debates with an eye to the formulation of policy governing possible future debates. Of course, these ideas, too, have more general theoretical and methodological considerations so they cannot really be separated from what has been said so far.

The First Debate. The drawing power of the first debate, particularly its ability to attract almost equal proportions of both parties and large proportions of even the least-educated groups, may be a unique occurrence. Later debates showed a decline both in numbers and representativeness—though the audience was still phenomenal. Debates in future years, if they are institutionalized, may have considerably less appeal.

It is interesting to note that, in the present instance, the "primacy" effect was more powerful than the "recency" effect. Though Nixon had the better of the last two debates by com-

mon consent, appraisal of the debates as a whole consistently finds Kennedy the victor.²⁹

The Issues. There is no doubt that the debates were more effective in presenting the candidates than the issues. If anybody is interested in communicating the issues, it might be well to take account of some of the suggestions made by the viewers and reported above. The idea of limiting a given debate to a single issue is one such idea. (5).

Social Functions of the Debate. The role of the debates (and of the campaign generally) in focusing public attention on the national drama, for all its intended divisiveness, is probably a highly integrative force in American life. In this connection, one of the extraordinary aspects of the debates was, to everyone's surprise, that voters learned something about the candidate they opposed (even though they very rarely gave him their vote). For one thing, they remembered what he said (5); for another, they learned that he was human, that he could become nervous, tired, etc. (16). And, over the course of the campaign, there is evidence (14) of a decline in the percentage who report "dislike of other candidate" as an explanation of their own choice (though, it should be noted, this may simply be a product of learning better answers to the question as time went by). It seems that the debates might make for a greater acceptance of the winning candidate—even if one voted against him: one knew more about him, one felt that he was more human and more accessible.³⁰ But these are just guesses, and the pity is

²⁹ An alternative explanation would be that none of the succeeding debates (even the third—on foreign policy—which Nixon won decisively) produced a difference of the magnitude of the first debate. On "primacy" and "recency," see Carl I. Hovland et al., *The Order of Presentation in Persuasion* (New Haven: Yale University Press, 1957).

³⁰ In "Religion and Politics: The 1960 Elections," a paper delivered at the 1961 meetings of the American Sociological Association in St. Louis and based on the SRC study (27), Philip E. Converse suggests that the debates served to combat easy stereotyping of the candidates. He refers particularly to the concern of Protestant Democrats over Kennedy's Catholicism. "The mass media," says Converse, "—and the television debates in particular—filled in more fully an image of Kennedy. They did not modify cleavages by convincing Protestants that Catholicism per se was not black. But they did serve up a host of other items of information about this man. He was not only a Catholic, but was as well (in the public eye, from interview material) quick-witted, energetic, and

that in their concentration on the combat, the studies failed to get so much of either the context or the latent consequences of the institution of the debates.

The "Mistake" of the Debates. The word "debate" is probably the major mistake of the debates. It is probably more responsible for what went wrong with the debates, from a variety of points of view, than anything else. The decision to call the encounters between the candidates "debates"—especially since they were not really debates at all—surely contributed to the trivializing of the issues, to creating differences where none existed, to the exaggerated and formalistic concern with "who won," to some of the ritualistic rules that were adopted, and, to a certain extent, perhaps even to a discounting of the possible significance of the candidates' encounters for voting decisions in the election campaign. It appears, in other words, that the structure implicit in the concept of a "debate" influenced the format of the programs, the behavior of the candidates, and the reactions of the audience—as well as the design of research.

poised. These are traits valued across religious lines, and act at the same time to call into question some of the more garish anti-Catholic stereotypes. While in the grand scheme of things such perceptions may seem superficial, they are real to the actors, and the fact that such perceptions compete with some success against the initial cognition of the candidate's group membership gives some sense, in turn, of the superficiality of the latter as a cue for many people. Bit by bit, as religiously innocuous information filled in, the Protestant Democrat could come to accept Kennedy primarily as a Democrat, his unfortunate religion notwithstanding. Vote intentions angled away from group lines toward party lines."

D. INNOVATION AND CHANGE

INTRODUCTION

Communication, Innovation, and Change

ONE of the more significant events of the mid-twentieth century has been the emergence of the new nations. In Asia, in Africa, in Latin America, throughout the world, new states have been formed and their peoples have begun the radical transformation from preindustrial to modern society. At times, the problems these developing nations face appear almost insurmountable—for they are attempting, over a relatively short period of time, to accomplish political, social, and economic changes which it took the industrialized nations centuries to achieve. That such development is not impossible, that students of social change and national development express a guarded optimism about the future of the developing nations, is, to a large extent, attributable to the part which the mass communication media have come to play in development.

Fundamentally, the role of the communication process in any kind of economic or social development is threefold. First, communications play a role in providing people with information about a need for change, information about what changes can occur, about available alternatives, about the methods and means and benefits of adopting new ideas and new ways of doing things. Second, communications are essential to engender acceptance of change, to the decision processes which lead to trying a new kind of seed, or changing a diet, or utilizing birth control devices. In this role, communications are used to persuade and to open channels among people and between people and leaders such that new ways of doing things can be negotiated and compromises reached. Third, communications play an essential role in the teaching of skills necessary for accepted changes to be successful. Once the people are aware of something like the availability of birth control devices, and once they have decided to accept them as desirable, they still must

acquire information about how to use them. In short, communications of one kind or another play a part in every stage of the change process, in every phase of development.

When we turn attention to the developing nations, it is clear that without mass communications the course of change would be slow indeed. Many of these nations are characterized by isolated peoples, peoples whose loyalties have been traditionally directed toward a tribe or a local community rather than toward a nation, peoples who have been only vaguely aware of alternatives to the conditions under which they have so long existed. Moreover, many are nations which have been characterized by low literacy rates, by a lack of teachers, technicians, and community development workers, by a limited flow of information throughout the society. Given the mass media, however, many of these obstacles can be rapidly overcome. Radio and television have enabled the leaders to leap the literacy gap, to multiply access to the few teachers and change agents available, to increase availability of information of all kinds, information which is a necessary condition for development and change. And they have done all this more rapidly and to a greater extent than was ever before possible.

This is not to say that a sophisticated mass communication system is sufficient to engender and maintain the changes necessary for national development. In the developing nations, as in any other communication situation, the basic needs, values, beliefs, and capabilities of the people operate to determine the effects of any communication campaign. Indeed, given the nature of the traditional belief systems which characterize many of the inhabitants of the developing nations, belief systems which, unlike our own, do not necessarily value the very concept of change, there is good reason to expect strong resistance to mass-communicated development campaigns. In the developing nations, perhaps more than anywhere else, we might expect to find that interpersonal communications are essential complements to mass communications if change is to take place. In the developing nations, perhaps more than anywhere else, we run a great risk that mass-communicated information, which is totally

new to large parts of the audience, will be misinterpreted. And in the developing nations, perhaps more than anywhere else, we run the risk of creating needs, aspirations, and expectations which, because of other factors in the country, cannot be fulfilled, the risk of creating more frustrations and tensions than benefits.

The implicit question tying together the five articles which comprise the following section is: "How can the mass media be used to promote economic and social development?" Although not all of the research reported here was conducted in developing nations, the communication processes discussed, the itinerary of the change processes described, and the conclusions reached all have relevance for development programs in the new nations. Each, in its own way, attempts to examine the role of mass communications in encouraging people to accept new ideas and new ways of doing things.

The first two papers, by Elihu Katz and Joe M. Bohlen, stem from the tradition of rural sociology, which has long examined how various technical innovations related to agriculture come to be adopted. One of the important themes in these two articles, a theme continually stressed throughout this book, is that the mass media do not operate in a vacuum. Although mass-mediated information plays an important role in some phases of the adoption process, interpersonal communications are never absent and often play the dominant role in other phases. That mass communications are only one of a number of factors which contribute to the success of a change program is also made clear in M. Brewster Smith's examination of how communication campaigns may aid in such things as family planning. Smith notes that both the motivational structure of the target population and the political implications of any planned change may, in many ways, be more important than the particular communication strategy a change agent chooses. Finally, the papers by Frederick T. C. Yu and by Daniel Lerner take a broad look at how communications may be used to implement change on a national scale. Yu writes about the conduct of communication campaigns in Communist China, and Lerner con-

siders the role of mass communications in the modernization of developing areas. Perhaps the most important theme in these last two articles pertains to how communications can function to create a climate for change.

ELIHU KATZ

*The Social Itinerary of Technical Change:
Two Studies of the Diffusion of Innovation*

This paper compares the two main research traditions for studying the diffusion of innovation within society. One is the tradition of rural sociology, represented in this case by the Ryan-Gross study of how Iowa farmers adopted hybrid corn. The other is group sociology and communication research, represented here by the Menzel-Katz study of how a group of doctors adopted a new prescription drug for their patients. The hybrid corn research provided a basis for thinking of stages of adoption and the differences between early and late adopters. The drug study was especially useful in focusing on the relation of group membership to adoption. The mass media were found to be useful in different ways at different stages of adoption—at first, to make potential adopters aware of new developments; later, to legitimize the decision to adopt. There is an encouraging degree of agreement between the two kinds of study. Dr. Katz is a professor in the Communications Institute, Hebrew University, Jerusalem. This paper was published in a volume entitled *Studies of Innovation and of Communication to the Public* (Stanford: Institute for Communication Research, 1961). A slightly revised version of the article was copyrighted in 1961 by the Society for Applied Anthropology and was published in *Human Organization* 20 (1961): 70–82. The paper is reprinted by permission of the copyright holder and the author.

RAPID SOCIAL AND TECHNICAL CHANGE is the hallmark of modern, urban society. The last few years, for example, have seen an upturn in the birth rate; an invasion of small, foreign-made automobiles; the triumph of the hula hoop; the rise and fall of the sack dress; the widespread acceptance of antibiotics and tranquilizers; and so on. Despite all of this, there are surprisingly few studies of the diffusion of innovation in the sense of tracing the movement of: 1) a given new practice; 2) over time; 3) through specific channels of communication; 4) within a social structure. This is all the more remarkable given that one would be hard put even to define various fields of behavioral

research without reference to the process of diffusion. Marketing, for example, obviously has to do with the diffusion of products; anthropology has to do with the transmission and change of culture; sociology is concerned, among other things, with the consequences of technical change, or with the spread of fads and fashions. Yet these traditions have tended to ignore the itinerary of change in the sense in which the diffusion process is defined above.

The aim of what follows is to compare two studies which have made a start in this direction. The one, by Bryce Ryan and Neal Gross, is a study of how hybrid seed corn gained acceptance among farmers in two Iowa communities;¹ the other is a study of how doctors in four communities responded to the availability of a new "miracle" drug.² Despite the seeming difference between a new seed and a new drug, and between farmers and doctors, the two studies will be seen to be comparable at many points, with respect both to research design and research results.

These studies also represent a noteworthy convergence of two traditions of social research which have had virtually no contact with each other. The hybrid corn study is one of the

¹ Discussion of this study will be based on the journal article reporting some of the central findings, and particularly on the later, more comprehensive report. These are, respectively, Bryce Ryan and Neal Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities," *Rural Sociology* 8 (March, 1943): 15-24, and Ryan and Gross, *Acceptance and Diffusion of Hybrid Seed Corn in Two Iowa Communities*, Iowa State College of Agriculture and Mechanic Arts, Bulletin 372, 1950.

² James Coleman, Elihu Katz, and Herbert Menzel, *Medical Innovation: A Diffusion Study* (New York: Bobbs-Merrill, 1966). Published reports on the study include: Menzel and Katz, "Social Relations and Innovation in the Medical Profession: The Epidemiology of a New Drug," *Public Opinion Quarterly* 19 (Winter, 1955-56): 337-52, a report on the pilot study; Menzel, "Innovation, Integration and Marginality: Facts and Problems from a Survey of Physicians," *American Sociological Review* 25 (1960): 704-13; Menzel, Coleman, and Katz, "Dimensions of Being 'Modern' in Medical Practice," *Journal of Chronic Diseases* 9 (1959): 20-40; Coleman, Katz, and Menzel, "The Diffusion of an Innovation among Physicians," *Sociometry* 20 (1957): 253-70; and Coleman, Menzel, and Katz, "Social Processes in Physicians' Adoption of a New Drug," *Journal of Chronic Diseases* 9 (1959): 1-19. An important part of the substantive material is contained in the latter two articles, while other parts are available only in unpublished research reports of the Bureau of Applied Social Research, Columbia University.

earliest products of that branch of rural sociology which has concerned itself—for the last fifteen or so years—with the study of factors affecting the acceptance of new practices recommended to farmers for adoption. The drug study stems, ultimately, from the tradition of research into the effects of mass communication.³ The two traditions have in common a concern with what has been called “campaigns”—attempts, in the short run, to change opinions, attitudes, and actions.⁴ In this sense, a voting campaign, or a campaign to reduce prejudice, or a marketing campaign is similar to the campaign of an agricultural experiment agency to persuade farmers to adopt some innovation. Yet, despite this similarity, the two traditions have shown little interest in each other. The key to the vast gap which has separated them is, surely, the different images of society which they have held. Mass communications research has tended to envision society as an audience of isolated individuals, hooked up to the mass media but not to each other. Indeed, the mass media are the very symbols of the atomized mass society. Rural sociology, on the other hand, conceives itself as being located near the opposite end of the “*Gemeinschaft-Gesellschaft*” continuum.

Very recently, however, mass communications research has begun to revise its image of the audience. A series of studies in the last few years has revealed not only that modern, urban society is not as individuated as had once been assumed but that the connections among family members, colleagues, and the like, have an important share in the communications process.⁵ It is this concern with interpersonal processes which is beginning to forge a link between the two traditions of communica-

³ For a discussion of the sequence of studies which contributed to the formulation of the drug study, see Elihu Katz, “The Two-Step Flow of Communications: An Up-to-Date Report on an Hypothesis,” *Public Opinion Quarterly* 21 (1957): 61–78.

⁴ This point is developed in Elihu Katz and Paul F. Lazarsfeld, *Personal Influence: The Part Played by People in the Flow of Mass Communication* (Glencoe, Ill.: The Free Press, 1956), pp. 15–25.

⁵ Reviews of some of these studies may be found in Katz, “The Two-Step Flow,” and in John W. and Matilda W. Riley, “Mass Communications and the Social System,” in Robert K. Merton et al., eds., *Sociology Today* (New York: Basic Books, 1959).

tions research being considered here.⁶ Nevertheless, the drug study was completed only a few years ago without any real awareness of its many similarities to the study which had been undertaken by Ryan and Gross almost fifteen years before.

This article has two parts. The first part is concerned with the *design* of the two studies. It is an attempt to illustrate the research strategies which are appropriate to research on the diffusion of innovation, and the main variables which must be taken into account. The second part of the article compares some of the *findings* of the two studies.

The Design of the Two Studies

The design of the two studies can be compared most usefully, perhaps, with respect to the basic elements already enumerated: 1) a given new practice; 2) time; 3) channels of communication; and 4) social structure. Each of these elements will be considered in turn.

A GIVEN NEW PRACTICE

Each study concentrated on a single new product. Hybrid corn seed emerged from its experimental stage in 1927 and had been almost universally adopted ten years later in the two communities studied. Gammanym, the newest member of a family of modern "miracle" drugs, became available to physicians in the early 1950's and achieved almost total acceptance in less than two years.⁷

The two products are far more comparable than they might appear to be. First of all, they both came *highly recommended* by competent scientific authority. They are both of *central importance* to the groups for whom they were intended. What is more, both seeds and drugs are the sorts of products whose effects can be measured with a rational yardstick which enables

⁶ See Elihu Katz, "Communication Research and the Image of Society: The Convergence of Two Traditions," *American Journal of Sociology* 65 (1960): 435-40.

⁷ The name gammanym is a pseudonym.

users to *see for themselves*, more or less, whether the innovation serves better than its predecessor. This is quite different from, say, fashion changes in clothing.

Another characteristic shared by hybrid corn and gammanym is that both could be accepted in *installments*. A farmer, for example, could experiment with the new hybrid seed in a small fraction of total corn acreage, just as a doctor could decide to try gammanym, initially, on only one or two patients. This is quite different, obviously, from take-it-or-leave-it innovations, like an air conditioner or a new car.

Still another important similarity between the two innovations is that both were essentially modifications of products with which farmers and doctors, respectively, had had considerable experience. Adoption of these innovations, then, required only relatively minor—but still not insignificant—changes in patterns of thought and action. Contrast these “substitute” products, for example, with the study of a “campaign” waged in a rural Peruvian community to gain acceptance of the ostensibly simple practice of boiling water before drinking it, where acceptance required a radical change in the traditional concepts of health and illness as well as a change in the rhythms of food preparation and of work within, and outside, the household.⁸

The two innovations share still other similarities. One of the most important of these has to do with the fact that differentials in wealth, or in *economic profitability*, do not seem, a priori, to be of major relevance in determining response to the innovation. In the case of hybrid corn, Ryan and Gross explain that no farmer cited the price of seed as a reason for delaying adoption of the innovation, nor was there any reason to believe that the increased return from hybrid corn would be disproportionately greater for operators of larger farms than of smaller ones.⁹ In the case of gammanym, of course, it is the pa-

⁸ Edward M. Wellin, “Water Boiling in a Peruvian Town,” in Benjamin Paul, ed., *Health, Culture, and Community*, (New York: Russell Sage Foundation, 1955).

⁹ “While it would be difficult to place a date at which the perfectly rational man would have adopted hybrid seed, under the assumptions of classical economic theory, the adoption date would have been practically the same for all

tient, not the doctor, who pays for the drug and thus doctors might all be expected to be equally likely to be the first to try the new drug.

This is not to say that there are no differences between the two products, or that the above enumeration necessarily catches up the most crucial dimensions. It can only be surmised that some of these dimensions—plus others like them—may well affect diffusion patterns. It is clear, at any rate, that any attempt to develop a comparative study of diffusion must incorporate a more systematic “content analysis” of the variable characteristics of innovations. Moreover, this must be done “functionally”; that is, the innovation must be characterized with respect to the patterns of thought and action of the people to whom it is directed.¹⁰

TIME

The second element of the diffusion process in terms of which the two studies may be compared is the element of time. In both studies, “acceptance” of the innovation was operationally defined as initial use of any amount of the product.

Notice that both studies *can assign a date* to initial acceptance and that it is the element of time, perhaps more than any other, which makes the study of diffusion possible. In the case of the farmers, the year of first use of the new seed was deter-

operators. That is, variations in the rational desirability of the seed between farmers were at a minimum—the trait was economically advantageous to all, and to much the same degree” (Ryan and Gross, *Acceptance and Diffusion of Hybrid Seed Corn*, p. 670). On the other hand, an economic analysis of time differentials in the diffusion of hybrid corn *between* different areas of the country (rather than *within* an area) shows that the “profitability” of the shift from open-pollinated to hybrid is highly associated with the rate of acceptance. See Zvi Griliches, “Hybrid Corn: An Exploration in the Economics of Technological Change,” *Econometrica* 25 (October, 1957): 501–22.

¹⁰ Suggestive attempts to classify innovations in this way have been made by a number of authors. See, for example, Homer T. Barnett, *Innovation* (New York: McGraw-Hill, 1953); E. A. Wilkening, *Acceptance of Improved Farming Practices in Three Coastal Plains Communities* (Raleigh: North Carolina Extension Service Technical Bulletin No. 98, 1952); E. E. Emery and O. A. Oeser, *Information, Decision and Action* (Melbourne: University of Melbourne Press, 1958); and Herbert Menzel, “Innovation, Integration and Marginality.”

mined by asking the farmer. In the case of the doctor, this was done by means of an audit of prescriptions on file in all pharmacies in the four communities which were studied. The month in which each doctor's earliest gammanym prescription appeared was counted as the date of his "acceptance" of the new drug. Thus, the drug study had the unique opportunity of obtaining an *objective* measure of past performance by virtue of the availability of the written record of prescriptions, while the hybrid-corn study relied on *subjective* recall.¹¹ But, what is of fundamental importance is that both studies devised a method of measuring time; this is the major key to their comparability.

CHANNELS OF COMMUNICATION

Both studies rely, at least in part, on the respondent's own ability to "reconstruct" the sequence of factors which influenced his decision. Yet, it is by no means clear how much trust can be placed in this ability—particularly when it concerns a decision which was made months, sometimes years, before. Essentially, then, there are two methodological questions which both studies confront at this point: 1) whether respondents are at all capable of reconstructing the elements which go into the making of their decisions; and, if so, 2) whether there is not a time limit on this ability.

Again, the hybrid corn study places more faith in respondents' testimony than does the drug study. Ryan and Gross say

¹¹ The drug study also asked doctors, during the course of the interview, to recall the date of their first use of gammanym, and the discrepancies between the objective and subjective information were analyzed. The data reveal that doctors erred in both directions, but the marked tendency of most doctors was to report themselves as having adopted the new drug considerably earlier than they actually did. Nevertheless, despite the tendency to "update" themselves, there is a positive correlation between the adoption dates obtained from the doctors and from the prescription record. (See Menzel, Coleman, and Katz, "Dimensions of Being 'Modern.'") Although it is probable that farmers also have faulty memories, given that corn is their most important crop and that they were asked to name the *year* of first use, it may be that their errors are smaller than those of the doctors. On the other hand, the farmers were interviewed long after most of them had begun using hybrid corn, thus increasing the chance of error.

only that "the channels through which farm operators first learned of the new seed were undoubtedly more complex than the farmers themselves realized." But they deal with them at face value nevertheless. And, in fact, a number of their findings with respect to farmers' use of the channels of communication have been corroborated by other studies.

The drug study, on the other hand, is much more skeptical. More explicitly than the hybrid corn study, the drug study makes an attempt to use more objective means to uncover the relevant influences operating on the decision to adopt gammanym. Along with the respondents' own testimony as to what influenced them, that is, the drug study analyzes variations in time of adoption as a function of the channels of communication to which respondents are *generally* exposed. This is a step backwards, in one sense, since the correlation between, say, amount of journal reading and time of adoption raises problems of interpretation which need not be raised in the case of subjective retrospection. Similarly, it is impossible to get at the *sequence* of media use by means of this method. On the other hand, however, despite the added risks of inference-making, there is reason to believe that this method produces results which would otherwise go undetected.¹²

Among the channels of communication are included such impersonal media as journals, direct mail advertising, and the like, and such personal ones as salesmen and colleagues. As has already been pointed out, both studies made special provision for taking account of the possible influence of neighbors and colleagues in the decision to adopt.

¹² Ryan and Gross employ this kind of correlational analysis, too. For example, they inquire concerning reading habits in much the way the drug study does and they find, as the drug study does, that early and late adopters are noticeably different in their communications behavior. Their tendency, however, is to interpret such results as if they were part of the set of factors predisposing respondents to early or late adoption, rather than direct influences on the specific decision being studied. The drug study does this and more; it tries, in certain instances, to establish a causal link between exposure to certain media and the specific decision to adopt—even though the respondent does not mention this medium in the "reconstruction" of his decision.

SOCIAL STRUCTURE

Social structure figures in a variety of different, although interrelated, ways in the sociological study of diffusion. Most basic, perhaps, is the fact that social structures serve as boundaries within which innovations spread. Thus one can compare the extent or the speed or the sequence of penetration of a given innovation within different neighborhoods, or social classes, or adolescent gangs.¹³ Differential rates of penetration can then be accounted for in the light of other elements which distinguish among social structures; social norms, for example, or different degrees of social integration, or status variations within some larger social structure.

Within a given structure, of course, individuals can be differentially "located" with respect to their statuses, relative integration, or the like. One can then examine the different responses to innovation characteristic of individuals in varying structural locations.¹⁴

Finally, social structures may also be seen as networks of interpersonal communication and, in this sense, obviously, the concern for channels of communication and for social structure coincides. Given this kind of social network, that is, one would want to trace the social itinerary of an innovation as it proceeds

¹³ For good examples, see Stuart C. Dodd, "Formulas for Spreading Opinions," *Public Opinion Quarterly* 22 (Winter, 1958-59): 537-54, and more impressionistically, William H. Whyte, Jr., "The Web of Word of Mouth," *Fortune* (November, 1954). The Swedish geographer Torsten Hagerstrand has mapped the spread of an innovation from urban centers to outlying districts, etc., emphasizing the role of social contacts within given localities. See "The Propagation of Innovation Waves," *Land Studies in Geography*, no. 4, The Royal University of Lund, Lund, Sweden, 1952.

¹⁴ See Public Administration Clearing House, "Experiences of Personnel of U.S. Voluntary Agencies," *Economic Development and Cultural Change* 2 (1954): 29-349. This presumes that group norms bind the more integrated members of a group more than the more marginal members and, hence, that group leaders are the most conformist members of their groups. For evidence concerning the relevance of this hypothesis for response to innovation, see C. Paul Marsh and A. Lee Coleman, "Group Influences and Agricultural Innovations: Some Tentative Findings and Hypotheses," *American Journal of Sociology* 61 (1956): 588-94.

over time.¹⁵ A child may not be able to "reconstruct" how he got the measles, but locating children with respect to their social structures—schools, friendships, community centers, etc.—will provide a good picture of the process of "social contagion," the relevant networks of communication within a structure, and the comparative importance of different structures (school vs. community center, for example).

Rather than interview a random sample of doctors, it was decided, in the drug study, to interview *all* doctors for whose practices the new drug was relevant. In addition to the usual questions concerning personal attributes, attitudes, communications behavior, etc., each doctor was also asked to name: 1) his three best physician friends; 2) the three or four physicians with whom he most often finds himself discussing cases or therapy; and 3) the colleagues on whom he most frequently calls when in need of special information or advice on questions of drug therapy. Thus each doctor could be located with respect to the structures of friendship, case discussion, and advice, and within each of these structures, the doctor could be rated in terms of 1) his relative integration or popularity—that is *how many* of his colleagues designated him; and 2) his particular network of association—that is, *which* of his colleagues named him. Thus sociometry provides one means for mapping the structure of interpersonal relations in order to determine their impact on individuals occupying different positions within them and to examine their role as potential paths for the flow of innovation.

¹⁵ Several studies have proceeded from a sociogram of friendship to map the flow of rumor. See Jacob L. Moreno, *Who Shall Survive* (Beacon, N.Y.: Beacon House, 1953), pp. 440–50; Leon Festinger et al., *Social Pressures in Informal Groups*, (New York: Harper 1950), Ch. 7; Back et al., "A Method for Studying Rumor Transmission," in Leon Festinger et al., eds., *Theory and Experiment in Social Communication* (Ann Arbor: University of Michigan Research Center for Group Dynamics, 1950). In the field of rural sociology, the most intensive analysis of the process of information diffusion within and between informal social structures has been the work of H. F. Lionberger. See especially Lionberger and Coughenor, *Social Structure and Diffusion of Farm Information* (Columbia: University of Missouri Agricultural Experiment Station, College of Agriculture, Research Bulletin 631, 1957), and the articles on this study in *Rural Sociology* 19 (1954): 233–344, 377–84.

The hybrid corn study also interviewed all the members of the two communities which were studied. But there is no sign that this aspect of the research design was put to use in determining the structure of social relations. Instead, information was simply collected from all community members as if they were unrelated respondents in a random sample. Attempts to map individual location within the social structure were made in more conventional ways. Respondents were asked to indicate the organizations to which they belonged, the extent of their contacts outside the community, the number of neighbors whom they visited, etc. Nevertheless, the authors of the hybrid corn study are keenly aware of the potential relevance of social relational variables and, indeed, explicitly regret not having designed adequate measures of social participation "due mainly to the great difficulty in devising them."¹⁶

The Findings of the Two Studies

Having noted the similarities in the design of the two studies, let us now compare some of the findings. This second section of the article will be concerned with the extent to which the empirical generalizations emerging from one study find support in the other. For, in a very real sense, these studies may be viewed as replications of each other.

We will proceed, point by point, to analyze their similarities and differences. But it will become apparent readily that there is a theoretical thread which connects these diverse points; it is a concern for the processes of interpersonal influence which figured so prominently in the diffusion of these two innovations.

1. THE RATE OF DIFFUSION

If the cumulative proportion of acceptors of hybrid seed is plotted over the ten-year period from its earliest adoption to the time when virtually all community members had tried it, the curve is S-shaped, indicating that 1) there was an early pe-

¹⁶ Ryan and Gross, "Adoption and Diffusion," p. 707, n. 62.

riod of adoption when a few pioneering farmers gradually tried the innovation, 2) a rapid middle period when many people adopted close upon each others' heels, and 3) a late period when even the diehards gradually accepted. The S-shaped curve has been associated traditionally with diffusion phenomena and has been assumed to imply not only that there are characteristic stages in the diffusion process but, more important, that there is intercommunication among the population of adopters. Such curves suggest, that is, that the fact that others have adopted is itself a source of influence making for further adoption. For example, if the pioneers who adopt an innovation immediately upon its appearance each tell their friends about it, and these friends subsequently tell their friends, and so on, the resulting curve of diffusion would look something like the curve in Figure 1.

Ostensibly, the curve of diffusion of gammanym (Figure 2) looks different. It shows that there was a rapid spurt of adoption in the months immediately following the release of the new drug which is described by the steep, nearly straight line reaching until the eighth month, during which period about two-thirds of the doctors wrote their earliest prescriptions. The curve tapers off thereafter and in the remaining eighteen months another 20 percent of the doctors began using it, bringing the cumulative total of doctors who had tried the new drug to about 90 percent. It is fairly clear that this curve lacks the tentative phase characteristic of the early days of hybrid corn. Perhaps this difference between the two curves reflects the greater conservatism of Iowa farmers as compared with the doctors.

What is really important about these two curves is not at all accessible to the naked eye. For, despite manifest differences between them, the fact is that the drug study provides strong support for what the corn study could only hypothesize: that interpersonal networks of communication have an important share in the diffusion process. This can be seen in Figure 3 where the cumulative curve of gammanym diffusion is plotted *separately* for different groups of doctors, classified according to the number of choices they received as friends.

Compare the two extreme curves. The curve for the most

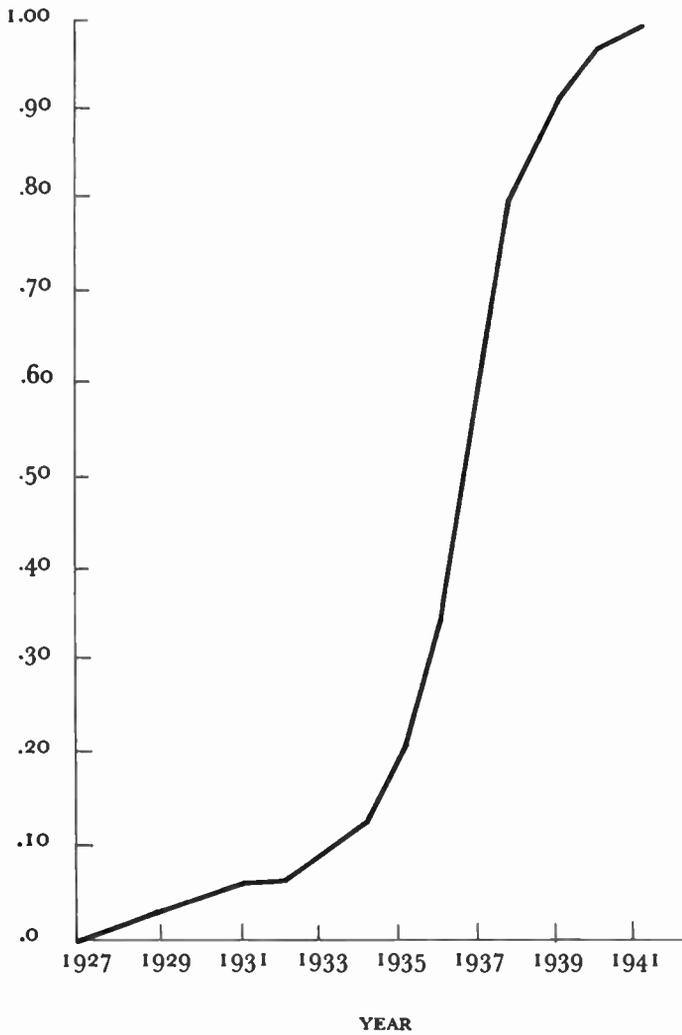


FIGURE 1. Cumulative percentage of farmers accepting hybrid seed during each year of the diffusion process. (Adapted from Bryce Ryan and Neal Gross, *Acceptance and Diffusion of Hybrid Seed Corn in Two Iowa Communities*, p. 672.)

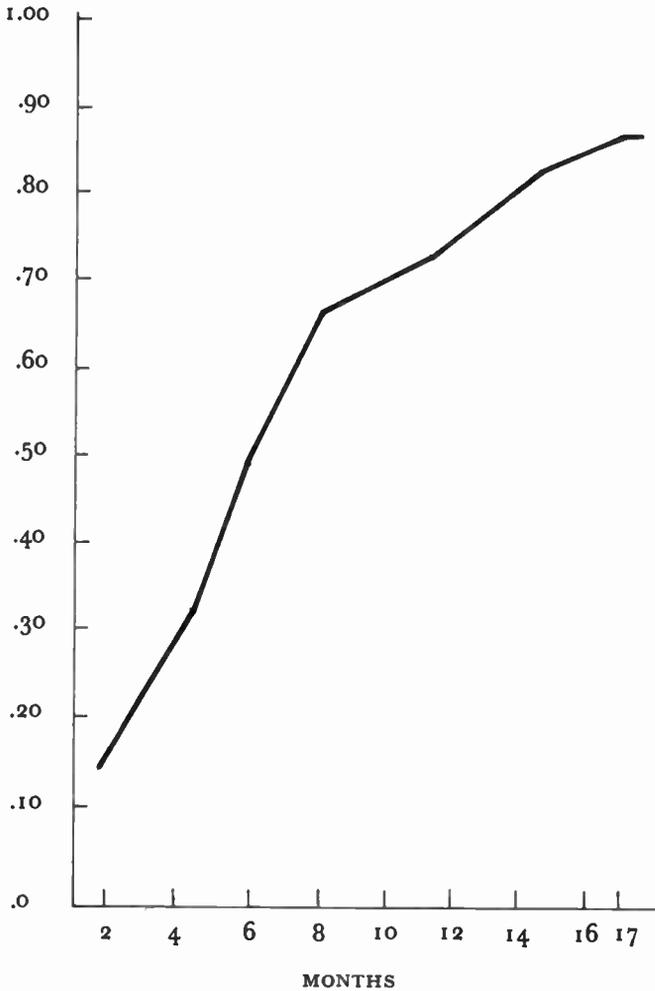


FIGURE 2. Cumulative percentage of doctors accepting gammanym in the communities studied over a 16-month period (N = 125).

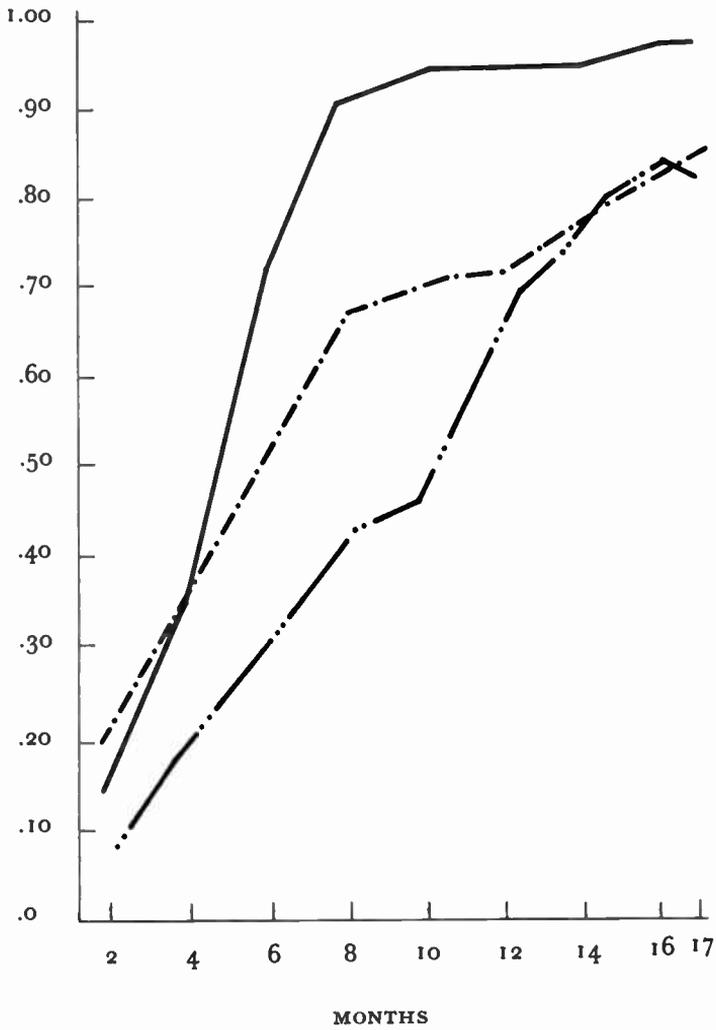


FIGURE 3. Cumulative percentage of doctors accepting gammanym over a 16-month period by number of friendship choices received.

"integrated" doctors continues steeply upward almost to reach its peak in the eighth month, while the curve for the "isolated" doctors rises at a constant rate. What is interesting about this is the fact that the curve for the "integrated" doctors can be closely approximated by a "chain reaction" model which grows as a function of the number of doctors who have already adopted. On the other hand, if one postulates a curve made up of a sequence of individual adoptions uninfluenced by interpersonal communication, one would approximate the curve actually obtained for the "isolated" doctors. This latter curve might result, for example, from some constant stimulus—say, advertising—operating each month so as to influence a constant proportion of those who have not yet adopted. This would be the case, for example, if 15 percent adopt during the first month, and 15 percent of those remaining do so in the second month, and so on.¹⁷ Unlike the social process of adoption, those who adopt in any given month are uninfluenced by those who adopted before they did.

In other words, the drug study argues that the curve of gammanym adoption is really made up of two quite different curves. One of these—that of the "integrated" doctors—resembles the S-curve of diffusion of hybrid corn in that both curves can be approximated by theoretical models based on the assumption that diffusion is a product of interpersonal influence. Thus doctors who are close to their colleagues are, by the same token, also integrated into a powerful network of communication. Doctors who stand outside these relationships are apparently more individualistic (and slower) in their innovating behavior as well.

Diffusion curves are made possible by taking account, in the research design, of the time of adoption and of social structure (in the sense of setting social boundaries in terms of which dif-

¹⁷ These matters are more fully, and somewhat more technically, discussed in Coleman, Katz, and Menzel, "The Diffusion of an Innovation," pp. 256–62. This article also presents theoretical curves alluded to here. Note that only the factors associated with relative integration behave in this way. The curves which distinguish doctors who read many journals also distinguish between early and late adopters, but the slopes of the two curves are quite parallel. See the discussion in Coleman, Menzel, and Katz, "Social Pressures in Physicians' Adoption," p. 13.

fusion is to be observed). The design of the drug study also called for classifying individuals in terms of relative integration in the social structure. Given these ingredients, it becomes possible to make *inferences* concerning the overall importance of interpersonal influence in the diffusion process and its differential importance for individuals who are differentially "located."

2. INNOVATION ON THE INSTALLMENT PLAN

Further evidence concerning the role of interpersonal influence can be inferred from a comparison of the degrees of caution exercised by early and late adopters in their initial trial of the innovation. It has already been noted that both hybrid seed corn and gammanym were not all-or-none innovations. You either purchase an air conditioner or you do not; you cannot begin with one part of an air conditioner, then slowly add more parts if it satisfies you. But farmers could do essentially just that with hybrid seed, and doctors could do it with gammanym. Planting hybrid in a certain percentage of his corn acreage or prescribing gammanym to a certain percentage of his patients could constitute a sort of experimental trial for each innovator; then, if he were satisfied, he could add more.

This is, in fact, what happened. No farmer planted all of his corn acreage to hybrid in the year he began with the new seed. What is more, as Table 1 reveals, the earliest adopters were extremely conservative in the percent of their acreage planted to hybrid during the year of their initial adoption.

Something very similar seems evident among the doctors. By classifying doctors according to the date of their earliest prescription for gammanym and examining the number of gammanym prescriptions written by each doctor during the three-day period which includes his earliest prescription, it is possible to see whether the earliest doctor-innovators, like the farmer-innovators, are more conservative in the extent to which they adopt the innovation. The parallel is evident from Table 2.¹⁸

¹⁸ These figures have been corrected for seasonal variations in the general level of use of drugs of the gammanym type. The method employed to make

TABLE 1. MEDIAN PERCENT OF TOTAL CORN ACREAGE IN HYBRID BY YEAR OF FIRST USE

First use	Percent of acreage in hybrid during first year
pre-1934	12%
1934	20
1935	8
1936	20
1937	19
1938	25
1939	30
1940	69
1941	54

Adapted from Ryan and Gross, *Acceptance and Diffusion of Hybrid Seed Corn in Two Iowa Communities*, Table 3, p. 68o.

Doctors whose initial prescriptions for gammanym appeared in the earliest prescription sampling period (one to two months following the release of the new drug) wrote an average of only 1.5 gammanym prescriptions during the three-day period while those who began in the following two months averaged 2.0 prescriptions, and so on. In other words, the innovators, measured by *time* of adoption, seem to be conservative in the *degree* of their first use of the innovation, while those who are conservative in time of adoption appear to be bolder in their degree of first use.

This finding of the two studies suggests that later adopters could depend, in part, on the accumulated experience of the innovators. Ryan and Gross put it this way: "In a sense, the early acceptors provided a community laboratory from which neighbors could gain some vicarious experience with the new

these corrections will be discussed in Appendix F of Coleman, Katz, and Menzel, *Medical Innovation*.

TABLE 2. AVERAGE NUMBER OF EARLIEST GAMMANYM PRESCRIPTIONS BY MONTH OF FIRST USE

Number of months between release of gammanym and month of first use	Average number of earliest prescriptions (3-day period)
1-2 months	1.5
3-4 "	2.0
5-6 "	2.7
7-8 "	2.6

seed over a period of years." ¹⁹ Thus, again—and from quite a different perspective—the empirical findings of the two studies appear to point to the relevance of interpersonal relations for the diffusion of innovation.

3. INFORMATION IS NOT ENOUGH

So far, we have been reporting essentially behavioral data relating to time of adoption, to relative integration, and to extent of first use of the two innovations. From these data, inferences have been drawn concerning the workings of interpersonal influence in the diffusion process. Now we turn to the respondents' own testimony concerning their communications behavior. That part of the research design which is concerned with the channels of information and influence becomes relevant here.

One of the first questions which deserves to be asked in this connection is whether later adopters adopted late *for lack of knowledge* concerning the existence of the innovation. The evidence of both studies points to a negative answer to this question.

Ryan and Gross distinguished in their interviews between the diffusion of information and the diffusion of adoption. They asked farmers to indicate the year in which they first

¹⁹ Ryan and Gross, "Adoption and Diffusion," p. 681.

heard of the new seed along with the year in which they first adopted it. While they found that it took about thirteen years for news of the innovation to reach every single farmer, the spread of knowledge was, in fact, highly concentrated during a three-year period when 60 percent of the farmers learned about it. Perhaps the important fact, for the present purpose, is that while over 90 percent of the farmers had heard of the new seed by 1934, less than 20 percent had tried it by then.

The data from the drug study point in the same direction, although they are less vivid. The time gap between hearing and adopting was necessarily much smaller among the doctors, since the drug was almost completely accepted in the communities studied less than two years after it was announced. The curve of adoption follows the curve of hearing much more closely among the doctors than among the farmers. Nevertheless, particularly during the early months following the release of gammanym, there is a substantial difference between the proportion of doctors who had heard of it and the proportion who had tried it: about two-thirds of the doctors date their earliest knowledge of the drug to within four months of its initial availability, but only about one-third of the doctors actually adopted it during this period. In later months, however, the cumulative curve of adoption and the cumulative curve of hearing move much closer together and roughly parallel each other. In the case of the farmers, it appears that almost everybody knew before almost anybody had adopted, so that information does not even begin to explain the difference between early and late adopters. In the case of later-adopting doctors, however, adoption came relatively soon after obtaining information.²⁰

²⁰ This is somewhat surprising in view of the fact that the drug company salesmen blanket a medical community quite early, and quite thoroughly, upon the appearance of a new drug. For this and other reasons, it seems likely that physicians knew about the drug earlier than they actually reported having heard about it. If this is true, it suggests that, whereas there is a tendency on the part of physicians to report an earlier date for actual use of the drug, there may be a tendency to report a later date for hearing about it so that the gap between hearing and action is shortened. This has not yet been looked into carefully and, of course, is difficult to check. For the moment, the data appear to imply that later adopters also heard about the drug later.

Nevertheless, there is a key piece of evidence which establishes that mere information did not constitute a sufficient basis upon which a doctor would decide to adopt, just as it was not sufficient for a farmer. The evidence is the fact that only about 10 percent of the doctors reported that they had adopted gammanym after hearing about it from the source of information which brought them their first news of the new drug. In "reconstructing" the sequence of sources of information which had bearing on their decision to adopt, that is, doctors invariably named at least two, and usually three or four such sources.

In other words, it seems reasonable to conclude that the availability of information than an innovation exists is not enough to make for its adoption. Additional factors must be sought, therefore, to explain both the decision to adopt as well as differentials in time of adoption.

4. THE IMPACT OF VARIOUS INFLUENCES ON THE DECISION TO ADOPT

Ryan and Gross report: "Throughout Iowa, the spread of information about hybrid seed became a major educational campaign in the thirties for both public and private enterprises. . . . Behind the hybrid movement lay not only the rational appeals and authority of research and governmental agencies, but also the initiative and ingenuity of private business interests." ²¹

Almost one-half of the farmers indicated that a salesman brought them their first information about the new hybrid corn, as Table 3 indicates. The second sources of influence in degree of importance were friends and neighbors.

The drug company salesman was no less important for the doctor than the seed company salesman was for the farmer. Altogether, 57 percent of the doctors indicated that the "detail man" had brought them their first information about gammanym. The only other source of any importance as a source of *first* news was direct mail from the drug company, which ac-

²¹ Ryan and Gross, "Adoption and Diffusion," p. 682.

TABLE 3. ORIGINAL SOURCES OF KNOWLEDGE
OF HYBRID SEED AND MOST INFLUENTIAL SOURCES

	Percent of farm operators crediting source with	
	Original knowledge	Most influence
Salesmen	49%	32%
Neighbors and relatives	18	50
Farm journals	11	2
Radio advertising	10	—
Extension service	3	2
All other media	9	14
Total farmers (100%)	(257)	(257)

Adapted from Ryan and Gross, *Acceptance and Diffusion of Hybrid Seed Corn in Two Iowa Communities*, Table 5, p. 682.

counts for 18 percent of the doctors. Much less frequently did doctors name another physician (7 percent did so), or a professional journal (also 7 percent) as a source of first information. (The picture is different for later sources of information, as will soon be seen.)

Both doctors and farmers typically went on to recount several other media as having been relevant—according to their recollections—for their decision to adopt the innovation. Although neighbors were mentioned by farmer respondents relatively late in the sequence of relevant media, when asked to evaluate the various sources in terms of their relative influence, neighbors were cited as more influential than any other medium (Table 3). Doctors, on the other hand, tended to evaluate salesmen as the single “most important” source, followed by journal articles and colleagues (Table 4). But it is also clear that the commercial sources (salesmen and direct mail) lose in relative importance when source of first knowledge and most

influential sources are compared, whereas sources inside the profession—journal articles and colleagues—gain.

The results of the drug study are comparable to the Ryan and Gross findings in another sense, too. This can be seen by examining the sequence of channels named by the doctors as having had a bearing on their decision, as is done in Table 5 for physicians (and they were a majority) who named three sources or more.

From Table 5 it appears that, while colleagues may not be important sources of *first information* about gammanym, they become increasingly important as *later sources* which come to *add* information and to exert influence. Thus, the table indicates that colleagues were, by far, the single most important “last source” of information prior to adopting the drug. Notice, too, that journal articles and drug house periodicals increase in importance over time, while salesmen and direct mail fall off. The suggestion of the table seems to be that the earliest source of information, the salesmen or direct mail, serves an *informational* role primarily but is not regarded as a sufficient basis for action. Before their decision to adopt is allowed to crystallize,

TABLE 4. ORIGINAL SOURCES OF KNOWLEDGE OF GAMMANYM AND MOST INFLUENTIAL SOURCES

	Percent of physicians crediting source with	
	Original knowledge	Most influence
Salesmen	57%	38%
Colleagues	7	20
Direct mail	18	8
Drug house periodicals	4	5
Journal articles	7	23
Meetings	3	—
All other media	4	6
Total physicians (100%)	(141)	(141)

TABLE 5. SEQUENCE OF SOURCES OF INFORMATION MENTIONED BY PHYSICIANS IN CONNECTION WITH THE DECISION TO ADOPT GAMMANYM *

	Percent of physicians crediting source with		
	Original knowledge	Additional information	Last information prior to adoption
Salesmen	52%	27%	5%
Colleagues and meetings	13	19	36
Direct mail	22	16	14
Journal articles	6	21	21
Drug house periodicals	3	11	21
Other media	4	7	3
Total mentions*	(87)	(131)	(87)

* The modal physician named three or more sources of information, and this table includes only the 87 who mentioned three or more sources. These 87 doctors named 131 sources intermediate to their first and last sources, and thus the middle column is percentaged so that 100% = 131 source mentions.

physicians turn to less commercial and more professional sources such as colleagues, journal articles, and the quality publications of the drug companies. These appear to have a *legitimizing* role; they indicate whether it is safe and right to go ahead. Ryan and Gross suggest exactly this:

Insofar as the farmers' evaluations were accurate, it may be suggested that the diffusion agencies are divisible into two moderately distinct types: those important as *introductory* mechanisms, and those important as *activating* agents. Thus, salesmen were credited with informing the majority of the operators, but neighbors were credited with convincing them. . . . The spread of knowledge and the spread of conviction are, analytically at least, distinct processes, and in the diffusion of hybrid seed have appeared to operate through different although complementary channels.²²

²² *Ibid.*, p. 685.

Recent work by other rural sociologists lends considerable support to this joint conclusion of the two studies. In general, it has been found that mass media serve to inform and that personal contacts are used to legitimate.²³ These findings seem to indicate that it is incorrect to view the media as essentially competitive. In fact, it may be that the search for the "most influential" medium is a fruitless one. It would seem that the focus should be the different uses of the media in varying social and psychological circumstances.²⁴

Thus the direct testimony of respondents in the two studies contributes further to a picture of the workings of interpersonal influence in the diffusion process. It adds to the inferences which were drawn earlier, the notion that the diffusion process is rather more dependent on interpersonal communication as a source of legitimation than as a source of information. While the farmers' "reconstructions" of the channels of communication which figured in their decisions give major credit to interpersonal influence, the doctors mention this channel rather less prominently than the earlier data might have led one to expect. (The two sets of findings are not contradictory; but there is obvious need for research on the reconciliation of "objective" and "subjective" sources of data in diffusion research.)

5. COMMUNICATION BEHAVIOR OF EARLY AND LATE ADOPTERS— CONNECTIONS WITH THE WORLD OUTSIDE

The next question that needs to be asked is obvious. If informal interpersonal influence is so important, who influences the influentials? Assuming, for the moment, that it is the early adopters who influence later adopters, let us begin by determining who and what influences the early adopters. Since nei-

²³ A good example is E. A. Wilkening, "Roles of Communicating Agents in Technological Change in Agriculture," *Social Forces* 34 (1956): 361-67.

²⁴ In this connection, see the new approach of George M. Beal and Joe Bohlen, *The Diffusion Process* (Ames: Iowa Agricultural Experiment Station, Special Reprint No. 18, 1957); and James H. Copp, Maurice L. Sill, and Emory J. Brown, "The Function of Information Sources in the Farm Practice Adoption Process," *Rural Sociology* 23 (1958): 146-57.

ther hybrid corn nor gammanym originated within the communities selected for study, an answer to this question will also help to locate the channels through which these innovations were "imported."

Turning again to the testimony of the respondents themselves, it is clear, from the hybrid corn study, that the innovators differed from those who adopted later by virtue of their greater reliance on salesmen. Later adopters mention colleagues far more frequently and more prominently and, hence, the picture of a "two-step flow" of diffusion suggests itself.²⁵ Hybrid corn was brought to the community by salesmen who were disproportionately influential for the early adopters, and the early adopters then were the primary sources of influence for those who followed them.

Again, the case of the doctors is less clear-cut. First of all, the channels mentioned by early and late adopters in their "reconstructions" fail to discriminate between them. From their subjective accounts, it appears that everybody, early or late, is exposed to much the same sequence of sources of influence. But then what explains the promptness of the innovators? The most persuasive evidence available tends to show that connections with the outside world do, indeed, influence the early adopters. In this case, however, the evidence is not based on the doctors' subjective accounts, but rather on the correlation of some of their known habits of communication and their early or late adoption. The innovator is more likely to subscribe to larger numbers of medical journals, for example, and this is so whether he is a specialist or not. The innovator is more often to be found in attendance at out-of-town meetings of medical groups; the specialty meetings, in particular, distinguish between early and late adopters. Moreover, early adopters of gammanym 1) visit out-of-town medical institutions and teaching hospitals more frequently than noninnovators, especially institutions at which they themselves received their train-

²⁵ The history of this concept is discussed in Katz, "The Two-Step Flow," and its relevance for innovation in agriculture is discussed explicitly in Everett M. Rogers and George M. Beal, "The Importance of Personal Influence in the Adoption of Technical Changes," *Social Forces* 36 (1958): 329-40.

ing, and 2) look to a greater number of out-of-town medical institutions as sources of their medical knowledge. In short, they are more "in touch" and, hence, more up-to-date than later adopters.

Looking at the matter in this way, of course, cannot establish conclusively that more extensive contacts with the medical world outside the local community "caused" the early adoption of gammanym. It might be that keeping "in touch" is but another reflection of the same underlying predisposition to be up-to-date professionally as is early adoption of a highly recommended new drug. Ryan and Gross, as a matter of fact, prefer this interpretation for their very similar findings.²⁶ They found that the earliest hybrid adopters (twenty-three farmers prior to 1934) reported an average of 4.3 trips to Des Moines—the nearest urban center—in the year preceding the interview, whereas the latest group to adopt (seventeen farmers in 1940–41) visited Des Moines only 1.5 times during the same period. Trips to county fairs, too, differentiated among the adoption groups. And, like the doctor innovators, farmer innovators were disproportionately likely to be avid readers of agricultural experiment station bulletins and high consumers of mass media generally. But from these data for doctors and farmers it does not seem a very daring inference that during the course of these efforts to keep "in touch" one learns of many new developments. One gets "the word" concerning them. Contact with the outside world, then, seems to be characteristic of innovators in the two studies.

6. COMMUNICATION BEHAVIOR OF EARLY AND LATE ADOPTERS—CONTACTS WITH COLLEAGUES

If the two studies are alike with respect to the differential contact of early and late adopters with the world *outside*, they appear irreconcilable with respect to contact *inside* the community. The hybrid corn study, as has already been indicated, finds that later adopters are more likely to indicate that neigh-

²⁶ Ryan and Gross, "Acceptance and Diffusion," pp. 706–7.

bors had influenced them in their decisions to adopt. Furthermore, using the subjective testimony of the respondents concerning the extent of their "neighboring" as a measure of informal integration, Ryan and Gross find essentially no difference between early and late adopters in the extent of their *informal* community ties, although the early adopters are more likely to have been active in *formal* organizations of all kinds. Add to this the greater importance of outside connections for the innovator, and the resultant picture is one of a group of farmer innovators who are oriented to connections outside their communities and who are proportionately more integrated in the formal organizational life than in the informal associational patterns.

At first glance, at least, this is not the case among doctors. The evidence of the drug study indicates that it was the *early* adopters who relied more heavily on their colleagues. In fact, the central finding of the study shows that integration in the medical community—measured sociometrically—is more closely related to time of adoption of gammanym than almost any other variable. And, unlike the relationship between outside connections and early adoption, in the present instance it can be shown that the fact of integration in the professional community "causes" early adoption via the intervening mechanism of interpersonal communication. Thus it is evident from Figure 3 that the integrated doctors were the earlier adopters and, from the shape of the curve, one can infer that this is because they channeled the message through networks of interpersonal communication. Moreover, doctors who adopted early were likely to adopt the new drug "simultaneously" with a sociometric colleague. That is, if doctors are paired according to their sociometric partnerships, and if the date of adoption of each set of partners is compared, it is found that innovating doctors were more likely than later adopters to write their first gammanym prescription close on the heels of a sociometric partner who had already written one.²⁷ Later adopters, on the other hand, do not act simultaneously with their sociometric

²⁷ This matter is rather fully discussed in Coleman, Katz, and Menzel, "The Diffusion of an Innovation," pp. 262-68.

partners any more than would be expected by chance. The "togetherness" of the early adopters, it is argued, necessarily implies interpersonal influence.

Thus the two studies are hardly parallel at this point. The hybrid corn study finds that the channels mentioned by the farmers themselves distinguish early and late adopters; the drug study does not. The hybrid corn study concludes that neighbors are more important for later adopters than for early ones; the drug study comes to the opposite conclusion. The drug study finds that doctor innovators are more integrated inside the community (just as they are more connected outside), while the farm study finds informal integration unrelated to innovating behavior. On the other hand, both studies find more formal affiliations—such as participation in hospital meetings, in the one study, and participation in organizations, in the other—to be positively associated with early adoption.

One possible approach to the understanding of these conflicting sets of findings emphasizes the special importance of interpersonal communication for early-adopting doctors as compared with early-adopting farmers. Innovation in medicine is risky business. A new drug represents a highly ambiguous stimulus to which the doctor is asked to respond without knowing all that he would like to know about it. In this kind of situation, communication among colleagues serves to spread, and thus to reduce, the individual risk. Talking over what has been learned about the drug through "outside" channels; evaluating it; deciding to adopt "together" and pooling early experiences—these are some of the functions of interpersonal communication among integrated, innovating doctors. The data almost imply a kind of "group decision."²⁸ This is not to argue that colleagues were ineffective for later adopters among the doc-

²⁸ The role of interpersonal influence in ambiguous situations has been studied experimentally, notably by Muzafer Sherif, "Group Influences upon the Formation of Norms and Attitudes," in Maccoby, Newcomb, and Hartley, eds., *Readings in Social Psychology* (New York: Henry Holt, 1958), pp. 219–33. The relevance of this formulation to other aspects of physicians' reactions to new drugs is discussed in Menzel and Katz, "Social Relations and Innovation," p. 344, and in Coleman, Katz, and Menzel, "Social Processes in Physicians' Adoptions," pp. 17–18.

tors. Indeed, they are probably quite important for these groups—in much the way that Ryan and Gross found interpersonal communication important for later adopters among the farmers. The argument of the drug study, in fact, presumes that later adopters—particularly among the integrated doctors but to some extent, too, among the isolates—profited from the experiences of those who tried the drug earlier. The drug study, therefore, does not claim that interpersonal communication was unimportant for later adopters but only that it was unusually *important* for the innovators.

A second possible approach to an understanding of the sets of findings focuses not on the different problems of innovating doctors, as compared with innovating farmers, but on the structure of *values* in the two communities. Ryan and Gross repeatedly emphasize that early adopters among the farmers were the vanguard of the secularization of rural life and “that farmers most emancipated from the traditional closely built neighborhood life more easily emancipate themselves from a traditional technique. These innovators, with their far-reaching contacts, represent an antithesis to characteristic features of solitary primary-group living.”²⁹

This is not true for the doctors. Integration in the larger medical world and allegiance to the scientific values of that world are strongly consonant with informal integration in the local community of colleagues. Indeed, these two kinds of affiliations, although perhaps not wholly without conflict, are empirically correlated and tend to reinforce each other. The local-colleague group, that is, seems to be identified with the scientific ethic of the profession as a whole. Therefore, it is the doctors who are most integrated, both formally and informally, both inside the local community and outside, who are in the vanguard of medical innovation. There is no question for the doctor, as there is for the farmer, of emancipation from local primary groups as a prerequisite to the acceptance of innovation.³⁰ In a sense, there is a parallel in this approach to the

²⁹ Ryan and Gross, “Acceptance and Diffusion,” p. 707.

³⁰ Of course, there may well be types of innovation in medicine toward which the otherwise progressive norms of professional medical groups would be inhospitable.

finding, in another study, that informal leaders in farm communities which are positively oriented toward innovation were ahead of the average community member in the number of recommended farm practices adopted, while the informal leaders of conservative-traditional communities were as far behind as the average member.³¹ Where the norms of informal groups do not favor innovation, that is, innovators will not be found to be well-integrated members of such groups.

7. OTHER ATTRIBUTES AND ATTITUDES WHICH DISTINGUISH EARLY AND LATE ADOPTERS

A number of other factors distinguish early and late adopters and, although they do not bear directly on the role of interpersonal relations in the diffusion process, they are important for the comparative task undertaken here. One of the most interesting of these is the attitude of "secularism" which is invoked repeatedly in the hybrid corn study as a motivating factor in the behavior of innovators. It represents an openness to rationality rather than tradition as a criterion for decision-making. The parallel among the doctors is the doctor with "scientific orientation," an attitude which also implies an openness to change. Thus construction of an index of "scientific orientation" (based on doctors' concern with research, exchange of scientific information, and scientific reliability of information) reveals that the more scientifically oriented doctors adopted gammanym earlier—this, despite the greater caution which one also associates with scientific orientation. Similarly, the innovating doctor is more "profession-oriented" than "patient-oriented." As compared with later adopters, he measures himself in the eyes of his colleagues rather than in those of his patients.

pitable. The history of medicine provides many examples such as those reported by Bernhard J. Stern in "Social Factors in Medical Progress," Faculty of Political Science of Columbia University, *Studies in History, Economics and Public Law*, no. 287 (New York: Columbia University Press, 1927). See also Menzel, Coleman, and Katz, "Innovation, Integration and Marginality," for a discussion of different types of innovation in medicine.

³¹ Marsh and Coleman, "Group Influences and Agricultural Innovations."

What personal attributes characterize the innovators? The early adopter of gammanym, first of all, was a heavy user of drugs in the gammanym family prior to the appearance of gammanym; the farmer innovator, by the same token, had considerably more corn acreage than later adopters. Both farmers and doctors who adopted early tended to be of higher socioeconomic status than their fellows; the farmer innovators had more education and higher incomes (although they were not significantly more likely to be owners of their own farms as compared with later adopters), while doctor innovators were more likely to have patients of higher incomes (and thus, presumably, to have higher incomes themselves). Nevertheless, as has already been pointed out, there is no a priori reason why economic status should have been associated with early acceptance of these innovations although new drugs, of course, are notoriously expensive and doctors with poorer patients cannot so readily confront their patients with drugs of this kind.

Farmer innovators were young; doctor innovators, while very unlikely to come from the oldest age group, were slightly more likely to be in the middle-age bracket than in the very youngest group.

A Summary of Similarities and Differences

Altogether, considering that farmers and corn seed were compared with physicians and drugs, the similarities in the findings of the two studies give strong support to a number of empirical generalizations.

The comparability of the two studies is made possible in the first place because both studies were designed to take account of the major components of the process of diffusion viewed sociologically. Thus, 1) both studies focus on a given innovation; 2) both follow the spread of the innovation through time, by devising methods for assigning a date to each adopter's first use of the innovation; 3) both studies are concerned with the channels of communication which carried news of the innovation as well as with the channels which carried word that it was all right to go ahead and try; and, finally, 4) both studies specify

social structures within whose boundaries the innovation spreads and with respect to which individual adopters are differently "located."

Given this kind of research design, certain kinds of analysis follow directly. Thus both studies plot curves of diffusion to map the spread of the innovation, over time, within the social structure or various parts of it. The authors of the corn study inferred from the curve that interpersonal influence would appear to account for the observed pattern of spread. The drug study went one step further and, by comparing the curves for "integrated" and "isolated" doctors, could show that interpersonal influence was operative precisely where it would most likely be expected—among the "integrated" doctors. Thus the drug study was able to confirm and further to specify the conditions for the operation of interpersonal influence in the process of diffusion.

Similarly, employing the data on channels of communication, both studies find that "information is not enough"—neither farmers nor doctors accepted the innovation upon first hearing. It was shown that there are media which typically inform a potential adopter about an innovation, and that there are media which "activate" or "legitimate" the decision to adopt. The former tend to be more commercial and more formal; the latter, more professional and more informal. The salesman is a key source of information in both studies; interpersonal influence among colleagues is a key source of legitimation. By cross-tabulating time of adoption and channels of communication, both studies find the innovators more closely connected to sources of information and influence outside the community. Innovating doctors make more trips to out-of-town meetings than do later adopters; innovating farmers make more trips to the city.

By cross-tabulating time of adoption and relative integration, the drug study finds that early adopters have relatively more contacts inside, as well as outside, their home communities; they are more integrated in informal social relations with colleagues. The corn study, however, finds the early adopters more "independent" of informal community ties. Two ap-

TABLE 6.

A. THE DESIGN OF THE TWO STUDIES

	<i>Corn Study</i>	<i>Drug Study</i>
A specific innovation	Hybrid corn	"Gammanym" (a "miracle" drug)
Time	Farmers classified according to own reports on year of first use	Doctors classified according to date of first prescription on file in pharmacies
Channels	Farmers' reports on the channels that influenced their decisions to adopt; farmers' reports on their general communications behavior	Doctors' reports on the channels that influenced their decisions to adopt; doctors' reports on their general communications behavior.
Social structure	All farmers in two midwestern farming communities; individuals classified in terms of age, size of farm, etc., and in terms of their own reports concerning formal and informal integration	All doctors in four midwestern communities; individuals classified in terms of age, type of practice, etc., and in terms of relative formal and informal integration measured sociometrically

B. THE FINDINGS OF THE TWO STUDIES

Rate of diffusion	Curve implies three stages in diffusion process, and operation of interpersonal influence	(Curve implies two stages?); curve for "integrated" doctors implies interpersonal influence; curve for "isolated" doctors implies individualistic adoption
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Extent of first use	Early adopters are conservative in extent of first use; later adopters, building on experience of their predecessors, give more acreage to hybrid in season of first use	Early adopters are conservative in extent of first use; later adopters, building on experience of their predecessors, write a larger number of gammanym prescriptions in month of first use
Channels of information and influence	Lack of information does not explain differentials in time of adoption, implying that information alone is not enough to make for adoption	Only 10% of doctors adopt on basis of information brought by initial information source, implying that information alone is not enough to make for adoption
Communications behavior of early and late adopters	<p>Typical farmer heard first from a salesman, then talked it over with a neighbor. Neighbors were judged "most important" information source. Implication that commercial and formal sources "inform" while more informal sources "legitimate" decision to adopt</p> <p>Early adopters read more farm bulletins</p> <p>Early adopters name salesmen as information sources more frequently than later adopters; latter name neighbors more frequently</p>	<p>Typical doctor heard first from a salesman, then read about it in a journal and/or discussed it with a colleague. Salesmen were judged "most important" information source. Implication that commercial and formal sources "inform" while more informal sources "legitimate" decision to adopt</p> <p>Early adopters read more medical journals</p> <p>No difference in recall of information sources by early and late adopters</p>

TABLE 6, *continued*

Other differences between early and late adopters	Early adopters make more trips to city, county fairs	Early adopters attend more out-of-town meetings
	Early adopters belong to more formal organizations; no difference in extent of informal neighboring	Early adopters more integrated than later adopters in informal friendship discussion and advice networks
	Early adopters more "secular" in attitudes; later adopters more "traditional"	Early adopters more "scientific" in attitudes; also more "profession-oriented" (rather than "patient-oriented")
	Early adopters have more corn acreage	Early adopters are heavier users of "miracle" drugs
	Early adopters have more income, more education	Early adopters have richer patients
	Early adopters are younger	Early adopters unlikely to come from oldest age group

proaches to the reconciliation of the conflicting findings were proposed.

Whether these generalizations apply equally to the diffusion of other innovations remains to be seen, of course. Surely, the special characteristics of these innovations, the particular way in which they were marketed, the peculiar characteristics of the social structures into which they gained entry, must all have affected their social itineraries. Clearly, what is needed is a comparative study of innovation which will trace different innovations, variously classified, as they proceed through given social structures. Altogether, the aim of this article has been to contribute to the design of such research and to help sharpen the issues which must be confronted.

JOE M. BOHLEN

Research Needed on Adoption Models

One of the best-known and most widely used models of diffusion and adoption has been the five-stage model originally proposed by the author of this paper in 1957. It promptly became a trademark of rural sociology and has been used in many studies in many countries. This paper represents Bohlen's later thoughts on the model. As noted in connection with Rogers's volume, *Communication of Innovations* (1969), there is now some tendency to telescope the five stages; Bohlen is frank to point out that a great deal more research is needed on the adoption process. This paper appeared in the *North Central Regional Research Bulletin* in 1968. It is copyrighted by the University of Missouri Agricultural Experiment Station, and is reprinted by permission of the Station and the author. Dr. Bohlen is professor of rural sociology at Iowa State University.

THIS PAPER has a narrow focus within the broad context of research on adoption and diffusion of ideas. Its purpose is to explore some of the research needs on the models of adoption which are used most widely.

The paper is divided into two parts. The first is devoted to an explanation of the logic involved in the development of one of the models. This is presented in some detail because most of the recommendations for research in the latter part of this chapter flow from these logical assumptions.

One of the widely known research models in the area of adoption-diffusion research is the five-stage model of adoption first proposed by this author in the protocol of the publication that became known as "How Farm People Accept New Ideas." Since that time, it has appeared as the basic model in books by Lionberger and Rogers and publications by other authors in a number of countries.¹

¹ Subcommittee for the Study of the Diffusion of Farm Practices, North Central Rural Sociological Committee, *How Farm People Accept New Ideas*, North Central Regional Extension Publication No. 1. (Ames: Iowa Agricultural Extension Service, November, 1955); Herbert F. Lionberger, *Adoption of New Ideas and Practices* (Ames: Iowa State University Press, 1960); Everett M. Rogers, *Diffusion of Innovations* (New York: The Free Press, 1962). "How Farm People Ac-

Needs Refinement

The heuristic model was validated first by empirical research and reported in the journal of the Rural Sociological Society in 1957.² Since that time, much research has gone on which indicates a need to make refinements in this basic model.

To suggest directions for these refinements and research related to them, it may be fruitful to review the assumptions behind the model and the process by which it was derived.

This model contains assumptions about the process by which the human personality develops and about how man responds to stimuli when he receives them. These assumptions were published in a paper delivered at the Symposium on Capital and Credit Needs in a Changing Agriculture, sponsored by the Tennessee Valley Authority and held in Knoxville during April, 1960.³ Essentially, these are the basic assumptions: 1) man is a telic being; 2) man is an acting being; 3) man is an organizing being. Man does not respond to stimuli in a simple reflex arc, SR.

Man is born into the world with certain biologically determined potentialities (intelligence, physical size, resistance or susceptibility to certain bodily ills, physiognomy, etc.). He is also born with a predisposition to act, or to sustain, physical activity. Because of the unique nature of his intelligence, he is inclined to place all the phenomena which he perceives into patterns of meaningful interrelationships. Man is an organizing being. He organizes the world around him into cause-effect relationships which appear rational to him. In many instances,

cept *New Ideas*" and "The Diffusion Process," by George M. Beal and Joe M. Bohlen, (Special Report No. 18, Agricultural Extension Service, Iowa State College, March, 1957), are known to have been translated into Spanish, Portuguese, German and Dutch. The publications are widely used in the Agricultural Institutes of India in the training of extension workers.

² George M. Beal, Everett M. Rogers, and Joe M. Bohlen, "Validity of the Concept of Stages in the Adoption Process," *Rural Sociology* 22 (1957): 166-68.

³ This in revised form is Ch. 20, "Sociological and Social Psychological Factors," by Joe M. Bohlen and George M. Beal, in E. L. Baum et. al., eds., *Capital and Credit Needs in a Changing Agriculture* (Ames: Iowa State University Press, 1961).

he does this without taking into consideration all the data which are known or available to know. Hence, he sometimes assigns relationships between and among phenomena in the universe which are spurious from the point of view of empirically verifiable truth claims.

Man is able to go through the process of perceiving interrelationships because he has the ability to think in terms of abstractions. In other words, he can create symbols—including words, numbers, pictures—in his mind which have their referents in the universe empirically known to mankind. This frees him of the necessity of being in immediate sensory contact with phenomena in order to respond to them or act in relationship to them. This faculty, unique to man, allows him to respond to stimuli, taking into consideration not only his own past experiences, but also those of other men who met similar situations in other places and at other times.

Because man has this ability to cope with abstractions and communicate via the exchange of meaningful symbols, he has another uniqueness. Man is the only form of life faced with the necessity of making distinctions between those things which are real and those things which are possible. All life forms other than man (and possibly the higher primates) must have immediate sensory contact with phenomena in order to respond to them. Creatures who do not create symbols do not perceive a future since the future is an abstraction. Alternative future relationships which an entity wishes to establish between himself and other phenomena are available only to creatures who use symbols to conceptualize the relationships that could exist between phenomena with which they have immediate sensory contact. Since other life forms respond more or less directly to stimuli, their behavior patterns are predicted much more easily than are the actions of men.

Man Does Not Respond Directly

Man never responds to a stimulus directly. Whenever a human being is faced with a stimulus (a problem), he responds not to it, but to the interpretation he places upon this stimulus

in his experience world, which includes his past experiences, his future expectancies or goals (ends and means), and his perceived relationships of this stimulus to both. He concerns himself, not only with the realities of the situation as perceived through his sense organs, but also with the possible outcomes resulting from choice of alternative responses he might make. Since he thinks in symbols, he can project himself into the future and choose the alternative in which his judgment will help him to maximize his satisfactions.

Since man is this kind of being, his personality (i.e., the bundle of beliefs, feelings, values, and attitudes unique to him) is a result of the hereditary package with which he was born and the unique experiences he has had since then.

When man acts in relation to a stimulus, two residues remain: (a) the change in physical nature resulting from the action (change in muscle tonus, fatigue, organic changes, etc.), and (b) the memory of the experience. The memory of the experience is composed of the recall of the details of his actions and interactions and a judgment about the experience. Man tends to assign a normative factor to each experience; i.e., it was good or bad, satisfactory or unsatisfactory, pleasant or unpleasant, rewarding or unrewarding.

As a result of this intellectualizing about experiences, man develops a set of values—beliefs about what *should be* the relationships between phenomena in the universe and how he as a unique phenomenon *should* relate himself to the rest of this universe.

Reflects on His Experience

It follows from the above premises that, whenever man receives a stimulus, he tries to recall whether or not he has ever received a similar stimulus in the past. If he did, he attempts to reconstruct his actions in relationship to this previously received stimulus. He recalls also the judgments he had about the outcomes of the actions he took; this is done both in terms of the ends or goals he chose and the means or methods he chose to attain the ends. Man relates his past to the future by

asking himself if he still desires the same goals as he did when he acted in relation to these similar stimuli in the past. If he decides that his desires have changed, he asks himself what different ends and means are possible for him and, of these, which is most desirable.

The personality of man is molded by the series of events that are part of his experience world. When he receives a similar stimulus repeatedly and each time responds in a similar manner, one which gives him satisfaction, he gradually changes the procedure of response. At first, much thought may go into the interpretation before he makes a response; as each additional interpretation is made and the results are satisfying, man puts less and less thought into interpreting the stimulus. He reaches a point where after only cursory scrutiny of the stimulus, he responds in a pattern which brought satisfaction in the past. When this has taken place, an individual has formed a *habit*, a convention by which he copes with relatively similar and familiar stimuli with a minimum of intellectual effort. This allows the individual to do many routine things very quickly and to utilize time for interpretation of new or unique stimuli. It usually takes a major change in the stimuli that affect a response that has become a habit before a person will discard this response and think through another. When an individual has developed a habitual response to a recurrent stimulus, frequently he neglects to notice that circumstances surrounding it have changed after a period of time so much that he is responding to a stimulus pattern in a manner which is no longer rational.

Builds Experience World

As indicated previously, man, the acting being, builds up his experience world and makes judgments about each experience as he has it. He judges experiences in terms of the relative satisfactions gained. He judges them to be good, bad, or indifferent. The patterning of these judgments about one's past experiences forms what is commonly called one's value system. This value system is the basis of a set of tendencies to act in given

directions vis-à-vis various categories of stimuli. These tendencies to act, or attitudes, are major influences in the determination of man's behavior. Since man is not a UNIVAC, frequently he holds conflicting values and attitudes without serious deleterious mental consequences. In many instances, man segments his total attitude pattern. He may act rationally and consistently within a given area of values, even though these actions may be in conflict with another area of values.

As a man receives stimuli and contemplates alternative responses, he takes both ends and means into consideration. Part of man's value system is the tendency to organize both ends and means into hierarchies of favorableness to himself as an individual. He then places these in juxtaposition when making his choices of alternatives. In this process, a lower level or less favorable *end* may be selected because the *means* of attaining the higher level or more favorable end are too unsatisfactory to be acceptable. When a given end exists with alternative means of attaining it, man inevitably (unless he is mentally ill) chooses the mean which he considers most consistent with his value system, i.e., the one which is most satisfactory.

Five Adoption-Process Stages

The five stages of the adoption process as they currently appear in the literature were created as a heuristic tool from the logically derived stages listed below. These stages were derived within the assumptions previously stated.

Awareness. This is the stage at which the individual becomes cognizant of a stimulus he may or may not wish to relate to the phenomena which make up the universe he has organized into a meaningful whole—his subjective universe.

Information. This is the period or stage during which the individual is gathering data about the range of relationships which exist or might be made to exist between the new phenomenon and the other phenomena in his subjective universe.

Application (Evaluation). This is the stage during which the individual views, through a normative frame of reference, the various relationships possible between the new phenomenon

and the meaningful phenomena of his subjective universe. He applies his value system to these various alternative relationships and makes two decisions in sequence: (a) whether or not to attempt to incorporate this phenomenon into his subjective universe in some juxtaposition to the other phenomena there, and (b) the choice of means or ways in which the new phenomenon will be incorporated if he makes an affirmative decision in (a).

Trial. This is the stage during which the individual transfers the phenomenon from its symbolic existence in his subjective universe into an empirical reality. At this stage, he transfers his relationship with the phenomenon from symbols to the realities for which they stand. He, in essence, is validating his symbols through sensory experience with the empirical phenomenon itself.

Adoption. This is the stage at which the individual has had enough experience with the phenomenon and its possible relationships to other phenomena to have habituated his behavior in relationship to it.

From these logically derived stages, the operational definitions of these stages were created much as they appear in common usage today and as outlined below.

Operational Definitions

Awareness. This is the stage at which the individual knows of the existence of an idea or practice, but lacks details concerning its intrinsic nature and use. Awareness may begin as an involuntary act, a discovery by accident.

Information. In this stage the individual becomes interested in the idea. He seeks further basic information of a general nature regarding it. He wants to know why and how it works, how much it costs, and how it compares with other ideas or practices purported to perform the same or similar functions. He is concerned with knowing the conditions of use and the resources necessary to get optimum benefits from its use.

Evaluation. The individual takes the knowledge he has about the idea and weighs the alternatives in terms of his own

use. He considers his own resources of land, labor, capital, and management ability and decides whether or not he has the necessary resources to adopt the idea. He also evaluates the idea in terms of the alternatives available and of his overall goal structure. He considers whether or not the adoption of the idea will help him maximize his goal and objectives. If he thinks it will, in most cases, he makes the decision to give the idea or practice a physical trial.

Trial. At this stage the individual has the empirical experience of observing the idea in use. The trial stage is characteristically one of small-scale use by the potential adopter or his observation of use under conditions which simulate those of his own situation. At this stage, the individual is concerned with the specifics of application and use and the mechanics and actions related to how to use the idea.

Adoption. At this stage the individual uses the idea on a full-scale basis in his operations and is satisfied with it. He is no longer trying to decide whether or not the idea is good for him in his operations but has accepted it as an integral part of the particular operation into which he has incorporated it.

I do not wish to leave the impression that the adoption process is composed of stages through which the adopter passes in an irrevocable manner, and that he passes through each stage completely prior to entering the next stage. The process is portrayed in stages for heuristic purposes, and those not deeply involved in the empirical research frequently conclude that the actual process duplicates the heuristic. Such conclusions are not warranted by the data.

The first stage, *awareness*, is obviously a point in time for each individual adopter. Once one has been made aware of the existence of a specific idea or practice, he cannot have this particular experience again.

The exact lines of demarcation between the other stages of the process are not nearly so amenable to empirical validation. Research efforts to measure the process seem to indicate that the *information* stage begins when the individual assumes any initiative for gathering further information about the idea or practice.

The individual is in the *evaluation* stage when he is attempting to relate the general information which he has gathered to his own individual situation to determine whether or not the idea will further the attainment of his goals and whether or not he has the means—land, labor, capital, and management ability—to accept this idea as a feasible alternative for goal maximization.

Under circumstances that are part of the individual's daily routine, most people tend to begin evaluating as soon as they possess any facts. In the temporal sequence of events, therefore, an individual seeks general information, attempts to evaluate the idea on the basis of his present state of knowledge, decides that he needs more information, and reverts to gathering further general information. Any given individual may, in this manner, go back and forth between the *information* stage and the *evaluation* stage many times. However, he ultimately reaches a point at which he arrives at the conclusion that he has all the information he desires to make a decision about the applicability of the idea to his own circumstances. At this point, he decides to either implement the idea on some empirical basis or to reject it.

Studies have indicated that, whenever the idea or practice is adapted to small-scale use, individuals go through what is called the *trial* stage. At this stage, the individual is seeking empirical evidence through personal experimentation to support (or reject) the idea which he considered worth trying. He is verifying the usefulness of the practice in his own situation. There is evidence that a large percentage of farmers do go through a trial before adopting an idea on a full-scale basis.⁴

The evidence indicates that many of the earliest adopters do

⁴ Eugene A. Wilkening, "Acceptance of Improved Farm Practices in Three Coastal Plains Countries" (Raleigh: North Carolina Agricultural Experiment Station Technical Bulletin No. 98, 1952); Bryce Ryan and Neal Gross, *Acceptance and Diffusion of Hybrid Corn Seed in Two Iowa Communities* (Ames: Iowa Agricultural Experiment Station Research Bulletin No. 372, 1950); George M. Beal and Joe M. Bohlen, *The Diffusion Process* (Ames: Iowa Agricultural Extension Service, Special Report No. 18, March, 1957); Joe M. Bohlen, "The Adoption and Diffusion of Ideas in Agriculture," in James H. Copp, ed., *Our Changing Rural Society: Perspectives and Trends* (Ames: Iowa State University Press, 1964).

not need to go through a trial on their own farms to evaluate the idea or a practice. Some individuals who have high abilities in dealing with abstractions apparently tend to skip the trial stage and go directly from the evaluation stage to adoption.

The *adoption* stage for any individual on any given practice is that point at which he accepts an idea or practice as a part of his behavior. He has become habituated to the idea. The mental set toward critical evaluation has changed to one of satisfaction with the idea or practice. This does not imply that the adopter has ceased to look for a better alternative, however. It means that, at this given point in time, this practice is the most feasible alternative from the actor's subjective point of view.

Experience Affects Complexity of Ideas

These ideas range in complexity from simple ones with empirical referents that have a high degree of visibility to those of a complicated and abstract nature.

The complexity of any idea and the practices related to it are function of the amount of mental activity required to relate the idea to the experience world of the individual.

Other factors equated, the more complex any idea is, the more slowly it tends to be adopted. The complexity of ideas may be classified on a continuum from the most simple to the most complex. The following classification has been used to analyze the degree of complexity of any given practice.

A Simple Change in Materials and Equipment. This type of change would take the least amount of mental activity. It is a change wherein basic concepts have already been accepted. This level of complexity involves variations in accepted behavior patterns. It involves a minimal amount of change in attitudes.

An Improved Practice. The improved practice is one in which the adopter has to deal with two or more variables simultaneously. These variations take place within the general framework of his values and attitudes concerning the behavior complex within which he is making changes. The acceptance of

the practice does not involve major changes in existing activities.

An example of the adoption of an improved practice is a farmer's change from broadcasting fertilizer to side dressing fertilizer on his corn crop. He has to consider amounts, analyses, placement, and equipment, but he doesn't have to change basic values regarding the worth of commercial fertilizer to do so.

An Innovation. This type of change involves not only dealing with many variables at the same time, but also a change in values and attitudes toward the whole behavior complex. An innovation is a change which involves reorientation of individual value structure. To adopt an innovation, an individual must alter some of his attitudes and beliefs and substitute others before he can adopt an idea of this complexity.

Hybrid seed corn was an innovation. Under the open-pollinated seed corn system, farmers had established patterns of attitudes and values in regard to sources of seed supply and the basis upon which seed should be chosen. Neighbors and friends provided seed, and the seed was chosen on a phenotypic basis. Certain individual farmers who were usually known on a primary-group basis were the ones who did the choosing for those who did not select their own seed.

To adopt hybrid seed corn, an individual had to realign his values in regard to the source of seed supply and the appearance of the seed, and he had to understand that hybrid seed was being selected on the basis of its genotypic characteristics rather than its phenotypic attributes.

Once the idea of hybrids was established with corn, however, the acceptance of hybridization of other crops moved more rapidly. The history of the rapid adoption of other hybrids after farmers had accepted the concept of hybridization is well known.

There are other characteristics of practices or products, too, which affect the rate at which they are adopted.

The *visibility* of the results of a practice affects adoption in varying degrees. People who have a low ability to visualize abstract ideas tend to be more reluctant than others to adopt practices which do not produce highly visible outcomes. Other

factors equated, practices whose results can be readily observed are adopted more rapidly than those whose results cannot.⁵

This results from the fact that many people must be able to experience results in order to determine the suitability of a practice in their own situations. This may partially explain the observation that weed killers which destroyed weeds after they were standing above ground and growing were adopted more rapidly than were preemergent weed killers. Obviously, if the preemergent killers work perfectly, there are no empirical referents in the form of dead weeds.

This factor of visibility may have its impact in more subtle ways. If the visible results from application of an idea vary with the conditions under which it is used, the user may attribute the variations to the variability of practice outcome rather than to the circumstances of use over which he has control. For example, a farmer might attribute the differences in response to the same application of fertilizer on two different fields to variation in quality of fertilizer rather than the fact one field was lower in plant nutrients to start with. As fields approach the optimum in plant nutrients, the impact of any given application of fertilizer becomes decreasingly visible.

Visibility is a function of the frame of reference which an individual has toward a phenomenon. If he understands all of the criteria for measuring the results, he is more likely to use the idea at its optimum level, although the results are not dramatic at that level. The importance of an adequate frame of reference for making judgments cannot be overemphasized as a prerequisite of adoption.

The level at which individuals are capable of dealing with abstractions influences the extent to which they need empirical referents in order to establish a frame of reference for the use of any given practice. This will be discussed later in this chapter.

The *divisibility* of the product or practice is an important factor in determining the rate at which it will be adopted. This

⁵ James H. Copp, "Toward Generalization in Farm Practice Research," *Rural Sociology* 23 (1958): 103-11; Everett M. Rogers, "The Adoption Period," *Rural Sociology* 26 (1961): 77-82.

factor is most important for the majority of farmers who desire to try the new idea on a small-scale basis in their own situations before adopting it on a large scale. Highly divisible products can be tried on a small scale with little capital, labor, and management investment. Also, the consequences of a failure are reduced by the small-scale trial.

The economics of the practice are certainly a factor in the rate at which a practice or idea is adopted. A number of studies have measured the effects of profitability of a practice on the rate at which the practice is adopted. Practices which have a high marginal return tend to be adopted more rapidly than practices that yield low marginal returns on the investment. However, there is some evidence that large expenditures, regardless of the marginal return, will be adopted slowly by a large number of farmers because of internal capital rationing. Practices which give their economic returns in a given crop year or in an animal life cycle will be adopted more rapidly than those which require a longer period. This may be partially explained by the fact that many farmers are operating from capital positions which necessitate immediate returns on their production capital. It also may be related to the fact that many of the farmers are operating farms or parts of their farms on short-term leases. Under this circumstance, practices applied to the farm will benefit the adopter only if the returns accrue in the short run.⁶

Another factor limiting adoption of practices which return satisfactions over a long period of time is the short planning horizons of many farmers. More research is needed in this area.

Studies Needed to Refine Model

During the twelve years since this model was first introduced, the Iowa State University Rural Sociology Research

⁶ Eugene A. Havens and Everett M. Rogers, "Adoption of Hybrid Corn: Profitability and the Interaction Effect." *Rural Sociology* 26 (1961): 409-14; Zvi Griliches, "Hybrid Corn: An Exploration in the Economics of Technological Change," *Econometrica* 25 (1957): 501-22; William L. Flinn, "Community Norms in Predicting Innovativeness," paper presented at the Rural Sociological Society Meeting, Northridge, Calif., August, 1963.

Team, led by Dr. George M. Beal and the author, has done several studies on adoption of various ideas. This work and the work of others have shown that the basic model is still valid.⁷ These research works suggest some cogent areas for further study to refine the model and make it applicable to a wider range of specific situations. This may include consideration of the applicability of the model depending on the degree to which adoption decisions are impulsive or deliberately rational or whether they are essentially problem or innovation oriented as Campbell has suggested.⁸

There are still innumerable unanswered questions regarding the adoption process. The major purpose of the author in writing this chapter was to set down the ideas which from a subjective point of view are important ones to be pursued in future research. It is intended as a working paper, a point of departure for discussion.

This chapter contains little or no reference to research needs relative to development of methodological problems relevant to adoption-diffusion research. The limitations of time and space would not permit it. Such omission should not be construed to mean that methods are considered to be of minor importance.

One of the major limitations of the basic operational model is the fact that it is too general for use in certain empirical situations. The model best fits those situations where the new idea is one which involves a major investment of time, energy, or capital resources. When the individual is contemplating the adoption of an idea which demands such major investments, he

⁷ Nine individual reports based on Iowa Agricultural Experiment Station Projects 1320, 1420, 1422, 1492, and 1493. Also see George M. Beal and Everett M. Rogers, "The Adoption of Two Farm Practices in a Central Iowa Community" (Ames: Iowa Agricultural and Home Economics Station, Special Report No. 26, 1960); Gerald D. Klonglan, George M. Beal, and Joe M. Bohlen, *Family Adoption of Public Fallout Shelters, Sociological Studies in Civil Defence* (Ames: Iowa State Rural Sociology Research Team, 1964); Joe M. Bohlen and George M. Beal, *Dissemination of Farm Market News and Its Importance in Decision-Making* (Ames: Iowa Agricultural and Home Economics Experiment Station, Research Bulletin No. 553, 1968).

⁸ Rex R. Campbell, "A Suggested Paradigm of the Individual Adoption Process," *Rural Sociology* 31 (1966): 458-66.

will go through a period of fact-gathering and evaluation which may take long periods of time before the idea is tried. If the practice is tried on a small scale and the results of use are highly visible, the following may better describe the sequence. (The operational definitions used are essentially the same as outlined previously.)

Awareness	General Information	Trial	Specific Information	Evaluation	Adoption
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When a farmer becomes aware of new insecticide and has enough general information to know where and when to use it, he may purchase a very small amount and try it in his garden rather than in a field. The trial provides him with specific information about the idea and gives him the total data needed to adopt on a larger scale. The model above also fits the so-called "impulse buy" of certain products, such as a new toothpaste, a new shaving cream, or a different brand of cigarettes.

Another type of adoption which does not fit neatly into the older model is the adoption of a nonmaterial idea of position; for example, the adoption of a given individual's position regarding his country's entry into the Common Market or any other political or social action. Some research has been done on this type of adoption. Much more needs to be done.⁹

The research to date has placed much emphasis on the evidence of continued use as evidence of adoption. This obscures the significance of optimum adoption and the study of factors related thereto. Much more work needs to be done on determining the factors related to optimum or correct use of an idea. Such research might bring into clearer focus the differences in adopters.

More needs to be known about the kinds of criteria used by potential adopters in determining (a) whether or not to adopt the practice, and (b) if the practice can be used in varying intensities, in determining the intensity and extent of practice use.

More research related to the trial stage and the purpose of

⁹ Klonglan, Beal, and Bohlen, *Family Adoption of Public Fallout Shelters*.

trial might be fruitful. For instance, work at Iowa State University has indicated that personal and social characteristics of the potential adopters are highly related to the use of trial.¹⁰ This work infers that people with higher abilities for dealing with abstract symbols skip small-scale trials and go directly to full-scale use.

Ability to cope with abstract symbols may be only one aspect of intelligence that is related to rapidity of adoption. More work needs to be done on the development of measures which can be used under field conditions to get at these intelligence factors of respondents.

In the past, research has analyzed adoption and the various stages prior to it on the basis of empirical evidence of the use of the practice and in further analyses relating personal and social characteristics to the adoption. Results of these efforts have not always shown clear-cut relationships. It could be that there are many young, highly intelligent farmers showing up as late adopters who are ahead of others in mental adoption but prevented from actual adoption by limitations of capital, lease arrangements, or parental control in management. More work needs to be done on these factors.

More research also needs to be done on the relationship between the conditions under which respondents carried out their "trials" and ultimate adoption. Every adoption researcher can produce anecdotes from interview experiences which seem to imply that many ideas get rejected, not because the idea wasn't good, but because the person carrying out the trial didn't follow directions or in some other way failed to use the idea as recommended.

Another aspect of trial upon which more research is needed is that of the relationship of the frame of reference of the potential adopter towards the idea and his ultimate adoption or rejection of this idea. There is some evidence that some ideas are rejected, not because the idea is bad, but because the potential user did not have a realistic frame of reference for outcomes. In one Iowa study, 20 percent of the farmers who had

¹⁰ Nine individual reports based on Iowa Agricultural Experiment Station Projects 1320, 1420, 1422, 1492, and 1493.

tried a specific *grass killer* said that they were not going to use it again because it did not kill *broad-leaved* weeds.¹¹

At all of the stages, more research is needed to determine the relationship between personal attributes of potential adopters and their choices of information sources.

Further studies of the role of one-way and two-way communications in helping people to adopt new ideas also are needed.

Differences in use of information sources due to stage and personal characteristics of potential users need to be pursued further. Little is known about meaningful impact via mass media devices of commercial advertising compared to editorial copy or commentary.

Habit probably plays an important role in resistance to new ideas. Much more research needs to be done to determine the impact of the desire to continue known ways of doing things to which the user can assign some probability statements in regard to outcomes.

The difference between risk, to which one can assign probability statements, and uncertainty, to which one cannot, is frequently the difference in knowledge. Thus one might hypothesize that the kinds of beliefs (knowledge) which individuals have about possible relationships of new ideas will be related highly to their actions in regard to these ideas. In this research area only beginnings have been made.

This approach assumes that habit is ramified not only by satisfaction with the known, tried alternatives but also by fears about the new and untried.

There is some evidence to date that those who are the first to adopt new practices may prefer different kinds of information at *all* of the adoption stages. Some preliminary work at Iowa State indicates that these earliest adopters have higher levels of ability to cope with abstract symbols and prefer factual, intensive definitions and ideas, whereas the late adopters prefer more of the how-to-do-it type of information.¹² These late adopters tend to seek out evidences of success in use. The "success story" in the farm magazine or by word of mouth from a

¹¹ *Ibid.*

¹² *Ibid.*

neighbor provides the bolstering of judgment needed to make a decision.

More work is needed in the development of scales and other measures of attitudes. Scales are now extant which provide tools to measure the relationships between idea adoption and risk aversion, independence, attitudes toward science, traditionalism, and other traits. There is a need to improve these scales and to go beyond them seeking the data which will help to understand why these attitudes are held.

More needs to be known about the relationship between subjective security and adoption. Some evidence exists that the earliest adopters have a greater belief in their capacity to be masters of their own destinies and in being able to cope with exigencies as these arise.

Little has been done by university researchers to determine the factors involved in choosing one alternative means rather than another after an individual has chosen a new idea as a goal. Not much is known about the intellectual process which a farmer goes through in choosing a given brand of combine after he has decided that harvesting should be done with this type of machine. The easy generalization that he chooses within a framework of economic rationality has been refuted so frequently in related areas of adoption research that its validity is open to suspicion in this one.

Another area of research which has not had much attention from workers in the field has been the nonadopters of new ideas. Some work has been done in Minnesota and, currently, work is underway in Ireland attempting to determine why farmers have not adopted practices which have been demonstrated useful in agriculture.

More needs to be done in placing the theories and findings of adoption research within the concept of overall social action and social change.

The few people in the world engaged in this research area have a great challenge, and are in no immediate danger of working themselves out of problems to study.

M. BREWSTER SMITH

*Motivation, Communications Research,
and Family Planning*

Population control is now regarded as one of the essential elements of economic development in many countries. Consequently it is one of the areas of development to which modern knowledge of communication is being called upon to contribute, and one of the great natural laboratories where contributions are being made to our understanding of the process and effects of communication. In this paper, Dr. Smith, who is chairman of the psychology department of the University of Chicago, sums up elements of communication theory that promise to be useful to family planning programs and campaigns. The paper was published originally in the *Journal of Chronic Diseases*, and copyrighted by the Journal, in 1965. It is reprinted by permission of the author and the copyright holder.

THE FERTILITY of a population can be viewed as the result of many individual acts and decisions, made within a framework of biological and environmental constraints. Questions of human motivation and motivational change thus have an important bearing on the viability of efforts to attain social control over population growth. Such questions enter the picture in two logically separable respects. On the one hand, the number of children desired by fecund couples varies from society to society, and, over time, within the same society. What factors lead parents to aspire to a particular size of family, and how may their desires be influenced in the direction of the small families required for slowly growing populations in an era of low mortality? On the other hand, couples differ in the extent to which they are motivated to employ rational and effective means of limiting their families to the size they desire. What motivational factors are involved in the acceptance and effective use of birth control, and how may the more effective use of birth control procedures be promoted?

These two kinds of motivational questions are thus respectively concerned with the private ends and means that affect

fertility and population growth. So long as the sizes of families that actually prevail in a population exceed the size that is typically desired—as when effective birth control techniques are not generally employed—the second type of question, concerned with the promotion of birth control, should have the top priority because of its strategic relevance to population growth. But in populations (typical of the economically well developed countries) in which birth control has gained widespread acceptance, questions concerning the motivation of desired family size become increasingly important from the standpoint of population policy. The main body of this paper is focused on the first problem. What implications can be drawn from social psychological research and theory that can contribute to the acceptance and promulgation of effective birth control practices? At the end, I will revert to the problem of desired family size in connection with a discussion of research needs.

Practitioners and scientists in other fields often look to the student of human motivation for near-magical solutions to problems that *they* cannot handle—and are ready with contempt when the magical solution is not forthcoming. If he is mindful of these ambivalent expectations, the social psychologist who ventures into the strange territory of population control and family planning will be wise to assume a posture of extreme modesty. In order to appreciate what research on communications and motivation *can* contribute, we had best begin by examining some of the reasons why such modesty is called for—not by way of apology, but to clear the ground so that relevance can be established.

Types of Communications Research

The years since World War II have seen the burgeoning in the United States of research on persuasive communication, and the emergence of a body of tentative empirical generalizations that Nathan Maccoby¹ has dignified as “the new scientific

¹ N. Maccoby, “The New ‘Scientific’ Rhetoric,” in W. Schramm, ed., *The Science of Human Communication* (New York: Basic Books, 1963), p. 41.

rhetoric." In spite of substantial progress in this field, however, communications research has been addressed to much easier problems than those confronted in the motivational aspect of family planning, and its empirical propositions have been worked out in much simpler, more promising settings.

One impressively cumulative research tradition has used controlled experimentation to identify factors that determine the effectiveness of communication once the recipient has been exposed to the message.² This body of work on "captive audiences," primarily the contribution of psychologists, has yielded a considerable array of generalizations. But apart from the simplification involved in starting with the captive audience, research in this tradition has characteristically chosen its ground so as to increase the likelihood of obtaining substantial effects, which facilitate the comparison of various factors in the modification of attitudes and practices. It has dealt more with short-term effects than with long-term ones, more with trivial or superficial issues than with emotionally laden and central ones, and more with changes in beliefs and feelings than with consequential behaviors. It has also been heavily based on conveniently available American student populations. Thus we cannot be sure that the same variables will remain important or have the same weights when communication with widely differing kinds of audiences on very different topics is at issue, but we can certainly expect that the magnitude of effects achieved will often be substantially smaller than in these experimental studies.

A second tradition, to which sociologists have been the main contributors, has used techniques of interview survey research in field studies of the effects of the mass media.³ In contrast

² A key reference in this tradition is C. I. Hovland, I. L. Janis, and H. H. Kelley, *Communication and Persuasion* (New Haven: Yale University Press, 1953). The more recent literature is reviewed, and a selection of empirical generalizations provided, in I. L. Janis and M. B. Smith, "Effects of Education and Persuasion on National and International Images," in H. Kelman, ed., *International Behavior: A Social Psychological Interpretation* (New York: Holt, Rinehart, & Winston, 1965).

³ See J. T. Klapper, *The Effects of Mass Communication* (Glencoe, Ill.: The Free Press, 1960), for a recent review of findings from this research tradition. An attempt at reconciling the general trend of results in experimental and in field

with the results of experimental studies, the typical finding in these field studies of "free" audiences has been one of rather minimal effects, primarily in the direction of reinforcing or activating existing attitudes, not of conversion. Again, the research has been primarily on American publics, and the range of issues explored has not been great. Voting and purchasing, as identifiable acts, have nevertheless made available a research focus on consequential behavior that goes beyond attitudes and beliefs.

Field research in this tradition becomes most relevant to population planning when it has been directed at the role of communications in the promulgation and diffusion of new techniques and practices. Converging evidence seems to point to a two-step linkage in which the public media have their effect primarily upon a limited subpopulation of "opinion leaders" (it turns out that they are different people depending on the issue), who in turn spread the message in their own spheres of personal influence.⁴ But the kinds of decisions involved in buying a new product, adopting a new drug, and introducing a new farming practice (all topics of studies in this vein) are a large step from those involved in family planning.

Even the most cursory thought about family planning highlights ways in which its motivational context differs so radically from the setting of most recent communications research as to represent a difference in kind, not in degree. The neutral language in which family planning is discussed scientifically and professionally should not let us forget that we deal here with sex and the marriage bed, around which surely are woven some of the strongest and least rational motives, the most intimate and private relationships, and the firmest institutional norms and taboos known to man. The very idea of introducing planful rationality in this "sacred" area could initially have been

studies is made by C. I. Hovland, "Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change," *American Psychologist* 15, no. 8 (1959).

⁴ E. Katz, "The Diffusion of New Ideas and Practices," in W. Schramm, ed., *The Science of Human Communication* (New York: Basic Books, 1963); E. Katz and P. F. Lazarsfeld, *Personal Influence: The Part Played by People in the Flow of Mass Communication* (Glencoe, Ill.: The Free Press, 1955).

conceived only in a society trained to give unprecedented priority to rational-technical considerations by long experience with them in more public, less emotionally charged spheres of urban and industrial life.⁵ Yet we are under imperatives to promote birth control in traditional societies that are just beginning to attain a modicum of rationality in the public, economic, and political spheres! Any attempt to extrapolate to the motivation of family planning from research on other topics runs the risk of sheer fatuity.

On this appraisal, the social psychologist who shares concern with the population problem has several options. On the one hand, he may proclaim the irrelevance of existing social psychological research and call for an enormous expansion of basic research on the motivation of change in birth-producing or birth-limiting decisions and behavior. It always seems both easy and virtuous to ask for more research, and more is obviously needed here, but I will nevertheless reject this option with respect to the promotion of family planning. For all its limitations, existing research has its relevance in ways I hope to suggest below. And I agree with Berelson⁶ that given the current urgencies and limitations of resources, the highest priorities for investment ought to be assigned in other directions.

A second option that I will follow in part is to draw cautiously on the results of existing research for hypotheses that seem relevant to social intervention in population control. The research will seldom warrant prescriptive advice to the practitioner. It may help to sensitize him, however, to potentially important factors that he has not considered explicitly. Particularly the negative conclusions of communications research—conclusions about circumstances in which persuasive communication is likely to be *ineffective*—may, a fortiori, help him to avoid wasted effort in the more difficult case of family planning. To the extent that action programs incorporate fea-

⁵ Methods of population control have of course been practiced in many traditional societies. But the use of such methods may reflect adaptations gradually developed in the culture, rather than deliberate decisions of rational planning.

⁶ B. Berelson, "Communication, Communication Research, and Family Planning," in *Emerging Techniques in Population Research* (New York: Milbank Memorial Fund, 1963), p. 159.

tures extrapolated from the results of research on other topics and contexts, these action hypotheses need to be checked in program evaluation—but so do all the hunches and insights around which programs are built, whatever their source.

In addition, the present fund of research experience can be drawn upon for aid in the better *theoretical* definition of the practical problem. Often to redefine a problem is to see the contingencies that bear upon its solution in a different light. My impression is that in the present modest state of research in motivation and communication, the greatest probable contribution of social psychology lies in this direction. With these preliminaries behind us, I therefore begin with an attempt to illustrate this third option.

Some Theory with Practical Implications

A little theory can often cast a useful searchlight upon silly practice. My favorite example comes from a wartime venture in venereal disease control, so far as I know unrecorded. The American troop information officers in Manila—high-ranking recruits from Madison Avenue—had the inspiration of modeling their appeals over Armed Forces Radio on a recently notorious and perhaps successful campaign of cigarette advertising, in which the advertisers of Lucky Strikes had filled the media for weeks with the unexplained slogan, LS/MFT, at long last announcing—after suspense had presumably built up to the point of nationwide breathlessness—LS/MFT: Lucky Strike Means Fine Tobacco. The Manila version, also repeated sententiously for weeks, went: VD/MT . . . VD/MT—with the final elucidation to a supposedly breathless audience: VD/MT . . . Venereal Disease . . . Means Trouble! A moment's theoretical consideration of the radically different behavioral objectives involved in raising the saliency for smokers of one among many closely similar alternative brands, and in motivating soldiers to avoid intercourse or employ prophylactic measures, should have stopped this pretentious effort.

The modification of birth-producing practices is a special and difficult case of the more general problem of the induction

of another's behavior by an outside agent. One of the most cogent analyses of the psychological processes involved in such "behavior induction" remains that of Dorwin Cartwright,⁷ which he presented in the context of selected findings from research on the sale of U.S. war bonds in World War II. To quote Cartwright:

What happens psychologically when someone attempts to influence the behavior of another person? The answer, in broad outline, may be described as follows: To influence behavior, a chain of processes must be initiated within the person. These processes are complex and interrelated, but in broad terms they may be characterized as (1) creating a particular cognitive structure, (2) creating a particular motivational structure, and (3) creating a particular behavioral (action) structure. In other words, behavior is determined by the beliefs, opinions, and "facts" a person possesses; by the needs, goals, and values he has; and by the momentary control held over his behavior by given features of his cognitive and motivational structure. To influence behavior "from the outside" requires the ability to influence these determinants in a particular way.

It seems to be a characteristic of most campaigns that they start strongly with the first process, do considerably less with the second, and only lightly touch upon the third. To the extent that the campaign is intended to influence behavior and not simply to "educate," the third process is essential.⁸

Cartwright's entire analysis is so pertinent that if space permitted, I would like to summarize it at greater length. He points out that to *create the desired cognitive structure*—gain acceptance for the relevant facts and beliefs—the message must first reach the sense organs of the persons to be influenced. Once it is received, whether the message is accepted or rejected will depend on how the person identifies it with more general categories to which it appears to belong. He will tend to fit new messages into his stock of categories in ways that serve to protect him from unwanted changes in his cognitive structure

⁷ D. Cartwright, "Some Principles of Mass Persuasion: Selected Findings of Research on the Sale of U.S. War Bonds," *Human Relations* 2 (1949): 253, and in this volume.

⁸ *Ibid.*, p. 255.

(change is resisted). *Creation of the required motivational structure* in a person involves getting him to see the given action as a step forward toward some desired goal—the more goals that are seen as attainable by a single path, the more likely the path is to be taken. Finally—and it is the implications of this last step that I want to develop here—*creating the required behavioral structure* so that the given action will in fact occur depends on establishing conditions such that the appropriate cognitive and motivational systems gain control of the person's behavior at a particular point in time. Cartwright suggests and illustrates three subprinciples in this connection:

The more specifically defined the path of action to a goal (in an accepted motivational structure), the more likely it is that the structure will gain control of behavior.

The more specifically a path of action is located in time, the more likely it is that the structure will gain control of behavior.

A given motivational structure may be set in control of behavior by placing the person in a situation requiring a decision to take, or not to take, a step of action that is a part of the structure.⁹

In the case of war bond sales, the advantages of specifying the path of action concretely (the first two of the foregoing principles) were illustrated by the substantially greater effectiveness of campaign appeals that said, in effect, "Buy an extra \$100 bond during the drive from the solicitor where you work," than of appeals of an earlier, expensive campaign that in substance merely recommended, "Buy War Bonds." The effective technique of personal solicitation, which required the solicited person to make a decision to buy or not to buy a bond then and there, embodied the third principle. It is easy to think of parallels in communications advocating birth control.

But the search for parallels reveals instructive differences between the two cases. Buying a bond is a single well-defined act, to which the principles just noted can be readily applied; the barrage of wartime appeals and solicitation was designed to make it easy to buy, difficult to refuse. By the technique of pay-

⁹ *Ibid.*, p. 264.

roll deduction, moreover, one decision can be made to commit the person to a whole series of purchases, which become equivalent to a single act rather than a set of independent actions. Once committed, the war bond subscriber has to make a separate decision to terminate his purchases—and the promotional campaign, of course, does nothing to encourage such decisions. In the sphere of birth control, however, all of the methods that depend on modifying the conditions of each specific act of sexual intercourse fall outside the scope of ready influence, according to these principles. It is simply not possible to arrange the equivalent of war bond solicitation to guide the decision processes affecting each separate act of intercourse. Neither is it possible, where these methods are at issue, to secure the kind of externally binding commitment to their practice that is represented by payroll deduction. The behavioral objective for their advocates must therefore be *not* the motivation of specific acts, but rather the establishment of consistent habits or the development in people of strong and consistent internalized controls. Both of these objectives are intrinsically much more complex and difficult to achieve. It is dubious whether even the best-planned promotional campaigns can often attain them.

The present analysis therefore highlights the probable relevance of a dimension along which techniques of birth limitation may vary, ranging from fully committing single acts (male and female sterilization), through infrequent acts the motivation of which can be separately induced (the insertion of intrauterine rings, long-term medication, perhaps abortion), to the entire range of chemical-mechanical procedures that must be carried out daily or before each occasion of intercourse. Included in this last, least promising category are not only the rhythm method and withdrawal, but also the daily pill, since each of these techniques requires multiple decisions to act or refrain from acting.

The initial middle-class leadership of the birth control movement has favored techniques that fall in the latter category, perhaps just because they seem to maximize voluntary decision—planfulness—about parenthood and thus appeal to middle-class values. It should be recognized, however, that any proce-

dure that maximizes and multiplies voluntary decisions is *disadvantageous* from the standpoint of permitting coordinated social intervention to limit births. If, as seems likely, promotional methods cannot instill sufficiently consistent contraceptive habits and self-discipline in enough people to achieve acceptable target reductions in birth rates, consideration might well be given to focusing promotion on more attainable goals. Sterilization and chemical or mechanical procedures that require attention only on infrequent occasions would seem to be more feasible subjects for promotional campaigns.

Note in passing that the dimension I have been emphasizing is closely related to one emphasized by Berelson in his grid of three main factors which he proposes for the orientation of field experiments on the promotion of birth control. Berelson ventures that the practically important variables which in combination define a framework for the planning of program testing are, first, the nature of the *society* (traditional or modern), second, the nature of the *contraceptive method* (hard to use or easy), and, finally, the nature of the *approach* (through whom the informational, educational, or promotional campaign is addressed, saying what, to whom).

For this second variable, he contrasts the traditional methods of withdrawal, condom, foam tablet, rhythm, etc., with the steroid pill and intrauterine device, saying: "What makes [the former] methods hard to use is the requirement for sustained motivation, the need in most cases to do something preparatory at the time of intercourse, and in some cases the sheer bother and nuisance value. Beyond such problems is the further difficulty that such methods are not always effective—so that the user or potential user may feel justified in thinking that the result is not going to be worth the effort."

Berelson calls for field studies aimed at providing an adequate basis for such gross administrative decisions as whether the "hard" methods can be effectively promoted in traditional societies, even with maximum effort.

Clearly Berelson is making much the same distinction as mine. But his unduly pessimistic dismissal of motivational theory leads him to couch the distinction in the more common-

sense terms of "hard" vs. "easy," which in turn leads him to neglect ways in which male sterilization (easy) and female sterilization (hard) both carry one feature of his "easy" list to an even higher degree.

The kind of motivational theory that I have borrowed from Cartwright differentiates analytically the cognitive, attitudinal, and decisional components of the problem of motivating a change in behavior. One may also look at the process temporally. In their generally perspicacious distillation of the literature of communication research for the guidance of written communication on birth control, Bogue and Heiskanen¹⁰ offer as their first principle that "the complete adoption of a new idea or a new mode of behavior is not a simple act, but is a *process* comprised of several steps or stages." For the adoption of birth control practices, they suggest the following four stages as a useful framework:

Stage I. *Awareness and Interest*. This stage includes learning that birth control is possible, respectable, and practical; becoming interested in it; and wanting to learn about it.

Stage II. *Information-Gathering, Evaluation, and Decision to Try*.

Stage III. *Implementation*. This stage includes taking action, learning how to use, correcting mistakes, and overcoming wrong ideas.

Stage IV. *Adoption and Continued Use*. This is the stage of full adoption. Couples who arrive at this stage feel that birth control is right and normal. They would be uncomfortable or fearful to have sex relations without it unless they positively wanted a pregnancy to occur.¹¹

While such a scheme of stages certainly does not represent an ambitious level of theorizing, it again illustrates the advantage that even low-level theory can provide: it functions as a scanning device in terms of which judgments are called for that might otherwise be neglected. Thus we are reminded that indi-

¹⁰ D. J. Bogue and V. S. Heiskanen, *How to Improve Written Communication for Birth Control* (Chicago: University of Chicago Family Study Center; New York: National Committee on Maternal Health, Inc., 1963).

¹¹ *Ibid.*, p. 7.

viduals and populations will be located at different steps along this continuum; the planning of communication strategy obviously requires information about the target population in this respect. Special surveys may be required. Further, the advantages become apparent of developing materials and approaches geared to the readiness and interests characteristic of a particular stage—and of finding or devising channels of distribution that match the materials to the readiness of the recipient. Once such a scheme is proposed, the consequences are obvious.

Some Implications of Research on Communication

Of all the results of communications research, the central finding that ought to be kept before all would-be communicators is the fact of resistance. In general, people's beliefs, attitudes, and behavior tend to be stable. Demands and arguments for change, uncomfortable new facts that do not fit neatly into accustomed categories, are likely to be resisted. Whenever communications attempt to change preexisting beliefs, attitudes, and habits that engage important goals and values, strong resistances are likely to arise at each stage of the communication process. Thus some communications are so strongly resisted that they fail to achieve even the first step of eliciting audience *exposure* to the message. The self-selective tendency by which audiences become restricted to the already informed and converted is a recurring and major source of frustration to organizers of persuasive campaigns.¹² Other communications that are somewhat more successful at the outset may end up by being just as ineffective because resistances are mobilized in members of the audience, while they are exposed to the message, which interfere drastically with *attention, comprehension, or acceptance*.¹³ No change or even "boomerang effects" may occur as a consequence of selective inattention to disturbing ideas, misperception of the message, or subsequent selective forgetting.¹⁴

¹² H. H. Hyman and P. B. Sheatsley, "Some Reasons Why Information Campaigns Fail," *Public Opinion Quarterly* 9 (1947): 412, and in this volume.

¹³ C. I. Hovland et al., *Communication and Persuasion*, p. 287.

¹⁴ J. T. Klapper, *The Effects of Mass Communication*, p. 18.

And as we have seen, even when a persuasive message is accepted, the recipient may fail to act upon it or lack the skill to act effectively.

Much effort is wasted in futile persuasive efforts because this paramount fact of resistance is neglected or underestimated. Before any major campaign in the difficult area of human reproductive practices is embarked upon, the would-be communicator should consider his chances of overcoming resistance sufficiently to justify his investment. Some pilot testing of materials and approach is normally called for before any substantial outlay of funds and effort is warranted.

One touchstone for distinguishing promising from unpromising situations is suggested by Hovland, Janis, and Kelley¹⁵ in their analysis of an essential difference between instruction and persuasion. They point out that in communication consensually defined as instructional, in which acceptance is more readily elicited, the setting is typically one in which the recipients anticipate that the communicator is trying to help them, that his conclusions are incontrovertible, and that they will be socially rewarded rather than punished for adhering to his conclusions. In situations commonly regarded as persuasive, on the other hand, interfering expectations are likely to be aroused which operate as resistances. These interfering expectations seem to be of three major kinds: (1) expectations of being manipulated or exploited by the communicator (distrust); (2) expectations of being "wrong"—out of tune with reality as they understand it; and (3) expectations of social disapproval (from people important to them whose norms do not accord with the communicator's position).

The situations encountered by communicators in the sphere of population control surely cover the full range between these two ideal types. The more that inculcation of the desired knowledge and practices can be conducted via the established educational, medical, and religious institutions of the community, the more the "instructional" conditions should apply. Conversely, the more the campaign is seen as a foreign body at

¹⁵ C. I. Hovland, *Communication and Persuasion*, p. 293.

variance with the natural and established order, the more closely the "persuasive" type is approximated under conditions that maximize the likelihood of resistance. To the extent that the latter conditions prevail, it is always an open question whether the effort is warranted.

Janis and Smith¹⁶ summarize the research evidence concerning the major sources of resistance to persuasive communication, classifying them under two rubrics: resistance due to the anchorage of a person's attitudes and practices in his group affiliations, and resistance due to anchorage in personality needs. Factors related to the former source of resistance have been extensively studied, documenting the obvious but important point, among others, that the more strongly attached a person is to his group, the more he is likely to resist "counter-norm communications" at variance with the standards and precepts of the group to which he belongs. Techniques of persuasion that emphasize a community orientation, legitimation by established leaders, discussion and group support, and the like, are intended to take these sources of resistance into account.¹⁷

Resistance to change anchored in personality needs arises inevitably from the fact that each person has a major investment in his own pattern of beliefs, attitudes, and behaviors that he has worked out in the give-and-take of living or adopted from his parents and mentors. Attitudes and practices are particularly obdurate to rational persuasion insofar as they form part of the person's armament for dealing with his unrecognized inner problems, containing and allaying his anxiety, and helping him to maintain adequate "face" toward self and world. It is in this respect that strong personality-anchored resistances may especially be anticipated in the intimate and emotionally charged area of sexual beliefs and practices. One implication, to the extent that such defensive sources of resistance are otherwise likely to be evoked, is that those techniques

¹⁶ I. L. Janis and M. B. Smith, "Effects of Education and Persuasion on National and International Images."

¹⁷ R. Lippitt, J. Watson, and B. Westley, *The Dynamics of Planned Change* (New York: Harcourt-Brace, 1958), has a well-conceptualized account of a group-oriented approach to the induction of planned change, with consideration of relevant evidence.

of birth control that dissociate the contraceptive decision from the intimacy of sexual life should meet with less resistance than others: the oral pill and, to a lesser extent, the implanted intrauterine device (which is associated with the sexual anatomy but not with specific sexual acts). And here, of course, lies the great obstacle to sterilization, where the motivational advantage that it requires only a single act of decision is counterbalanced by the fantasies of impotence, castration, or defeminization that it may invoke.

We have already noted a special source of personal and perhaps cultural resistance that becomes particularly relevant as efforts at population control are directed toward the rural and urban poor of traditionally oriented societies, or even of modern ones. Rationality, planfulness, capacity for delayed gratification, and broad time perspectives, all middle-class virtues that are called for by some approaches to birth control, become psychological luxuries that the extremely deprived, the hope-forsaken of the "culture of poverty,"¹⁸ can ill afford. Culturally supported attitudes of resignation, fatalism and present—rather than future—orientation are presumably clung to because they permit a measure of equanimity in the face of predictable frustrations; gratifications are grasped heedlessly when they are available because there is no warrant for confidence that forbearance will pay off. Programs aimed at reducing birth rates in such populations will obviously encounter the passive resistance of apathy and erratic performance, if they make demands on resources of planfulness and committing decision-making that are unavailable.¹⁹

The emphasis in the foregoing has advisedly been placed on obstacles and resistances to persuasive communication as an av-

¹⁸ O. Lewis, *Five Families: Mexican Case Studies in the Culture of Poverty* (New York: Basic Books, 1959); J. Blake, *Family Structure in Jamaica* (Glencoe, Ill.: The Free Press, 1961); L. Rainwater, *And the Poor Get Children* (Chicago: Quadrangle Books, 1960).

¹⁹ As noted in other papers in this symposium, the increasingly uprooted urban concentration may be more amenable than a traditional peasantry to innovation. Other accompaniments of modernization such as the reduction of high infant mortality and compulsory education may make individuals more accessible to new ideas, and freer from the restraints of group-anchored resistances.

enue toward population control, since an over-valuation of the power of the "persuader" seems to be a contemporary culture trait shared by professionals and laity alike. Yet research does suggest circumstances under which persuasive efforts are likely to meet with more success.

One such type of situation is that to which Katz and Schanck called attention a number of years ago, with the label *pluralistic ignorance*. "People will stay in line because their fellows do, yet, if they only knew that their comrades wanted to kick over the traces too, the institutional conformity of the group would quickly vanish. . . ." ²⁰ Where there are taboos or strong barriers against free communication, as is so likely to be the case in regard to sexual matters, states of pluralistic ignorance are especially likely to develop. Surveys of individual attitudes in the area of family planning will often turn up such instances, which then suggest points of vulnerability in the traditional norms that persuasion can capitalize upon.

Thus in their Puerto Rican survey, Hill, Stycos, and Back unearthed pluralistic ignorance that was giving vulnerable support to the *machismo* tenet that men are expected to want large families, especially of sons, as a proof of their masculinity. In fact, however, the men turn out to be even more oriented than their wives to small families. Their wives were unaware of this fact.²¹ To the extent that such constellations of misinformation prevail, programs that seek to induce freer communication can contribute to the emergence and stabilization of more appropriate norms.

A second class of situation that affords optimal opportunities for influence involves the captive audience. We noted at the outset, as a limitation on the generalizability of psychologists' experimental studies, that they have tended to focus on captive audiences with which exposure to the intended message is guaranteed. Certainly, results from such studies cannot be gen-

²⁰ D. Katz and R. L. Schanck, *Social Psychology* (New York: Wiley, 1938), p.

174.

²¹ R. Hill, J. M. Stycos, and K. W. Back, *The Family and Population Control: A Puerto Rican Experiment in Social Change* (Chapel Hill: University of North Carolina Press, 1959).

eralized to situations in which people are freely exposed to competing messages in the mass media, but there *are* important types of situations in which one can count on people receiving the desired message. In these situations there are many reasons to expect communications to be more effective, especially when the circumstances permit prolonged and repeated exposure under favorable institutional auspices. An ideal case is provided when the schools are available for instruction in family planning or for the promulgation of small-family values. Whatever messages can be channelled through the classroom not only have the advantage of a guaranteed audience; they participate in the context of "instruction" which as we have seen is likely to circumvent the resistances to which "persuasion" is vulnerable.

While no other case comes to mind that presents equivalent opportunities, there are others that share some of its advantages. For example, a program that enlists the participation of the specialists who officiate at childbirth—be they physicians, nurses, or midwives—gains access for communicating with women during a period when they may be expected to be especially receptive to information about family planning.

Political and Logistical Considerations as Strategic Factors

This selective and speculative survey points to tentative conclusions that come to me almost as a surprise. Existing knowledge, for all its uncertainty, calls into serious question the effectiveness of current effort and practice to attain population control by persuasive means. Even were the many "pilot" ventures to be regularized and multiplied, it seems to me unlikely that enough people would be reached, enough persuaded, enough confirmed in consistent birth-limiting practices, to achieve the socially desirable degree of reduction in birth rates. These doubts follow from the minor impact of persuasive campaigns under most circumstances, the major fact of resistance, and the motivational complexity of many of the widely recommended techniques of birth control. The most strategic class of factors governing the effectiveness of persua-

asive communication in this application seem to me to be essentially *political*, not scientific or technical.

Thus access to the schools and other respected and central social institutions—particularly medical—for the free and legitimate communication of facts and recommendations about family planning is clearly a political matter. Where the dissemination of birth control information is illegal, common agreement would see the strategic problem as one of how to get the law changed—not as a need for research on how to achieve more effective clandestine dissemination. So with the school: there is good reason to believe that schools could play a much more effective role than presently available channels; the political problem of access thus becomes more strategic than research on how to achieve more effective persuasion outside the legitimate institutional framework.

Political considerations are also involved in social decision about the acceptability of particular techniques of birth control, regardless of their effectiveness. The acceptability of the rhythm method and the inacceptability of all others to the Catholic church is of course a matter of engrossingly strategic politics outside and within the church. But quite parallel issues involve non-Catholics in value conflicts and potentially political disputes about such undoubtedly effective means as abortion and voluntary sterilization.

Gains on the political front would permit persuasive efforts to be directed to a larger extent than is presently the case in most countries toward objectives and via channels that have a fair chance of circumventing human resistances and producing substantial differences in people's reproductive habits and attainments. *Logistical* problems would then emerge as a close second to political ones in strategic relevance. Well-supplied and staffed clinics must be readily available if favorable motivation is to be converted into the desired action. Health educators in large numbers would be needed to convert existing pilot programs into operational ones. Not least, persuasive efforts toward population control will be immeasurably furthered by the cheap and ready availability of chemical and mechanical means of contraception that are designed to fit the

specifications of human motivation as well as of human reproductive physiology. The more effectively the design problem is solved, however, the more strategic will political factors become in determining the logistical availability of the perfected techniques!

The Need for Research

In spite of the uncertain and far from adequate state of psychological knowledge about persuasive communication, therefore, I cannot assign high priority in the grand strategy of population control to basic research in this area. There are too many greater urgencies. But there is great need for the feedback of dependable knowledge of results to guide the development of more effective persuasive programs, and equal need for dependable knowledge about the relevant beliefs, attitudes, and practices of each population that becomes the target of persuasion. The efforts that are called for fall at various locations on the continuum between informal observation and appraisal, systematic surveys and evaluations, and well-controlled experimentation in the field. A limited number of full-scale field experiments—the Puerto Rico study is in many respects a model—should amply repay the investment required, in providing the grist from which fresh insights can be developed into the processes by which limitation in birth rate can be induced. But the larger share of investment should go toward incorporating modest provisions for fact-finding, pretesting, and evaluation into all major action programs. Were this investment made (at a level of ambitiousness roughly proportional to the scope of the associated action program), wasted efforts could be avoided and cumulative wisdom developed about sound practice.

Applied research and program evaluation, then, fit the short-term urgencies concerning the promulgation of birth control techniques. The other motivational problem noted at the outset—that of individual goals for family size and how they may be modified—acquires its priority in a broader time perspective. There is time for basic research on this problem,

and there is need. If, as has been suggested, American couples are converging on preference for families of two to four children, what are the factors that tip the decision (which in the long run has vast consequences for population growth) toward the higher or the lower number? How may these preferences be modified? Surveys on American samples provide some leads.²² Other hypotheses have been suggested in speculative essays by psychologists²³ and by popular writers.²⁴ Elsewhere in this issue, Judith Blake advocates an indirect approach via the encouragement of female employment outside the home. Basic research now by psychologists and sociologists could provide knowledge that will be badly needed when effective birth control programs have succeeded in narrowing the gap between desire and achievement in family size.

Concluding Remarks

Apart from the priorities that I see as inherent in the field of population control, I hope that my colleagues in psychology will move the field of population research to a position considerably higher in their own scheme of priorities than the less than marginal position which it presently occupies. Because of the intimacy with which fundamental human passions and relationships are involved, the motivational and decisional processes associated with human fertility should provide a rewarding context in which psychologists may come to grips in research with important aspects of personality and social psychology.²⁵

²² R. Freedman, P. K. Whelpton, and A. A. Campbell, *Family Planning, Sterility, and Population Growth* (New York: McGraw-Hill, 1959); C. Westoff, R. G. Potter, P. Sagi, and E. Mishler, *Family Growth in Metropolitan America* (Princeton: Princeton University Press, 1961); C. Westoff, R. G. Potter, and P. Sagi, *The Third Child* (Princeton: Princeton University Press, 1963).

²³ For example, L. W. Hoffman and F. Wyatt, "Social Change and Motivations for Having Larger Families: Some Theoretical Considerations," *Merril-Palmer Quarterly* 6 (1960): 235.

²⁴ For example, B. Friedan, *The Feminine Mystique* (New York: Norton, 1963).

²⁵ *Acknowledgment*—I am indebted to Mr. Richard Gardner for bibliographic assistance.

FREDERICK T. C. YU

*Campaigns, Communications,
and Development in Communist China*

How is China using communication in the campaigns and programs by means of which it is trying to engineer society to its own model? Yu here describes Chinese campaigns and their communication content. Of course, like most contemporary American students of China, he has had to rely mostly on what can be read in Chinese publications and learned from Chinese refugees and travelers, rather than on field work. Nevertheless, he has assembled a great deal of information about the way communication is being used for practical effect in the most highly populated country in the world. Dr. Yu was born in China, and is now a professor in the graduate school of journalism at Columbia. This paper was published in a volume entitled *Communication and Change in the Developing Countries*, edited by Lerner and Schramm, published and copyrighted by the East-West Center Press, 1967. It is reprinted by permission of the author and the publisher.

SINCE 1949 China's millions have been constantly mobilized for mass action in a seemingly endless series of mass movements. If they are not mobilized to suppress counterrevolutionaries or flush out rightists, they are organized to swat flies or kill sparrows. If it is not one campaign, such as "turning your heart to the Party," it is another, such as learning to produce iron and steel. Tasks vary, and tactics change. But one movement always follows another with only the briefest interruption for the masses to catch their breath.

The phenomenon is not fortuitous. The use of mass movements is Peking's formula for national development. It is part of the style of the Chinese Communist revolution. It is, as one Communist leader puts it, "the fundamental method of implementing the general line of socialist construction."

Teng Hsiao-ping, secretary-general of the Chinese Communist Party, has this to say: "In our country, the mass movements play their role in all phases of the socialist revolution and construction. The broad mass movement guarantees that

the socialist revolution can be carried out thoroughly and speedily. It also ensures that greater, faster, better, and more economic results can be achieved in carrying out the socialist construction." ¹ He goes on to say:

It was through broad mass movements that we speedily and successfully carried out the socialist transformation of agriculture, handicraft industry, and capitalist industry and commerce. Immediately following this, it was again through large-scale mass movements that we won decisive victories of the socialist revolution on the political and ideological fronts. All old relations of production and the superstructure which shackled the development of the productive forces collapsed rapidly under the impact of such great mass movements, while new relations of production and the superstructure befitting the development of the productive forces have grown up rapidly.²

Chou En-lai sees the mass movement as an instrument of development policy in terms of the Maoist theory of "the uninterrupted revolution" and the Marxist-Leninist theory of "the development of revolution by stages." Looking at the first ten years of the Peking regime, he writes:

The socialist revolution on the political and ideological fronts has also gone through a series of mass movements which, in keeping with the concrete conditions of class struggle, advanced like waves, high at one time and low at another, and went deeper step by step. This correct leadership by the Party has enabled the masses both to maintain their revolutionary enthusiasm at a constant, full flow, without it cooling down because of pauses in the development of the revolution, and to raise the level of their consciousness constantly, step by step, so that they should not be unprepared for the further development of the revolution.³

The Chinese Communists take this matter of revolutionary enthusiasm and political consciousness seriously. To them, how

¹ Teng Hsiao-ping, "The Great Unity of the Chinese People and the Great Unity of the Peoples of the World," in *Ten Glorious Years 1949-1959* (Peking: Foreign Language Press, 1960), p. 92.

² *Ibid.*, p. 93.

³ Chou En-lai, "A Great Decade," in Teng Hsiao-ping, *Ten Glorious Years*, p. 56.

far and how fast they can achieve their current development plan of "accelerating socialist construction and preparing conditions for the transition to communism" depends upon how soon and how well they can awaken, sharpen, and elevate the political and ideological consciousness of the people. It is through the mass movements that the Chinese Communists seek to mobilize and manipulate the energy and enthusiasm of the masses for specific Party tasks and simultaneously to energize the population by heightening their consciousness for still more demanding Party tasks. And it is in the service of developing this consciousness of the masses that the Communists have sought to exploit every potential of communications.

The Parade of Campaigns

It is difficult to determine the number or categorize the types and lengths of mass movements in Communist China since 1949. Some movements, such as land reform, lasted for quite a long period of time. Some, such as "Increase production and practice austerity," are periodically repeated. Some, such as Great Leap Forward, consisted of a large number of campaigns. And the establishment of communes, while a nationwide movement, involved different segments of the Chinese population in different ways.

Generally speaking, however, the nation since 1949 has always been engaged in one major mass movement or another, simultaneously with large-scale campaigns or drives for different sections of the population at particular times. In 1964, for instance, the primary task of Peking's development plan continued to be "to go all out; to aim high and achieve greater, faster, better and more economical results; to build socialism." This is the same campaign banner which the Party had in 1958 when it launched the much-publicized and not too successful Great Leap Forward. "The most important content of the general line," according to the full-page editorial in *Jen Min Jih Pao* on October 1, 1964, remained very much the same:

To make use of all advantageous elements, to correctly deal with internal contradictions among people, to solidify and de-

velop the Socialist system of all-people and collective ownership, to solidify the proletarian dictatorship and unity of international proletariat, to continue to complete the socialist revolution on the economic, political and ideological fronts, and at the same time, to gradually develop technological revolution and cultural revolution and to transform our country as fast as possible into a socialist country with modern industry, modern agriculture and modern scientific culture.

What was missing from the 1964 version of the general line are the references to the "simultaneous development of industry and agriculture" or, more picturesquely, "walking on two legs."

For cadres in political, military, economic, cultural, and educational work there is the "socialist education movement."⁴ Its purpose is to "heighten class consciousness of the broad masses; to draw a clear line between socialism and capitalism; to enable cadres to be part of the masses and to participate in productive labor and scientific experiments along with the masses; to develop the ideology of the proletariat; to eliminate the ideology of the capitalist class; and to enable those high-level workers in cultural organizations to engage in popularization work."

Also in 1964 the entire population in China was mobilized to emulate the dialectics of "Four Firsts," which Marshal Lin Piao, one of Mao's top military commanders, developed as a method for army-building. He was supposedly inspired by Mao Tse-tung's oft-quoted dictum, "Political work is the lifeline of all economic work." The "Four Firsts" are: (1) man counts more than weapons; (2) political work is more important than any other type of work; (3) in political work, ideological work should take precedence over routine work; and (4) dynamic thoughts or current ideological questions are more important than bookish theories.⁵

But for artists and writers there continues the movement of "letting art and literature go to the countryside." And in the field of drama there is the campaign to study what is hailed as

⁴ *Hung Chi*, October 1, 1964, p. 6.

⁵ Kuo Li-chun, "The Dialectics of 'Four Firsts,'" *Hung Chi* (Red Flag, Peking), no. 4 (February 26, 1964).

“a big revolution on the cultural front”—the development of Peking opera with contemporary themes.⁶

The following is a partial list of mass movements during the first ten years of the Peking regime (1949–59). Only the campaigns that are generally known are included:

1949: The People's Republic of China was established in October. No large-scale national movements existed during the last three months of the year. But study movements were already beginning in universities and schools.

1950: 1. Land reform (reaching high tide in June, 1950)
 2. Resist America, aid Korea
 3. Reform of Christian churches
 4. Ideological reform of teachers of institutions of higher education
 5. Signing of peace movement documents
 6. Study of “New Marriage Law”

1951: 1. Land reform (continued)
 2. Resist America, aid Korea (continued)
 3. Signing of peace movement documents (continued)
 4. Suppression of counterrevolutionaries
 5. Signing of patriotic pact for industrial and business circles
 6. Three anti movements (anti-corruption, anti-waste, and anti-bureaucracy)
 7. Donation for purchase of airplanes and heavy artillery
 8. Relief and aid to military personnel and their families
 9. Labor emulation drive
 10. Winter school (for peasants)
 11. Democratic reform among factories, mines, and enterprises

1952: 1. Thought reform
 2. Resist America, aid Korea (continued)
 3. Volunteering of youth and students for Korea
 4. Land reform (continued)
 5. Study of Wu Hsun (This was a campaign against the bourgeois mentality of intellectuals, particularly writ-

⁶ *Hung Chi*, June 30, 1964, pp. 1–4.

- ers and film-producers. The film, *The Life of Wu Hsun*, portrayed a famous beggar who begged money to set up schools for poor children. It was severely criticized on the grounds that begging, even for such noble reasons, is undignified behavior that insults labor, and that the whole film vulgarized Marxist ideology.)
6. Five anti movements (anti-bribery, anti-tax-evasion, anti-fraud, anti-theft of state secrets, anti-leakage of state economic assets)
 7. Suppression of counterrevolutionaries
 8. Establishment of propaganda networks in the country
 9. Study of Mao Tse-tung's *On Contradiction*
 10. Increase production and practice austerity
- 1953:
1. Study of election law
 2. Sino-Soviet friendship
 3. Study program after the death of Stalin
 4. Mutual aid in agricultural production
 5. Resist America, aid Korea (ending this year)
 6. General line of transition to socialism
 7. First Five-Year Plan
 8. Thought reform among industrial and business circles
 9. Patriotism and hygiene
 10. Increase production and practice austerity (continued)
- 1954:
1. Agricultural co-ops
 2. Study of the constitution of the Chinese Communist Party
 3. Red Chambers Dream Incident (thought reform for writers and intellectuals)
 4. First Five-Year Plan (continued)
- 1955:
1. Movement of opposing the use of nuclear weapons
 2. Hu Fung incident (thought-reform campaign)
 3. Suppression of counterrevolutionaries (second major campaign)
 4. Agricultural producers' cooperatives
 5. Labor emulation drives

- 1956: 1. Hundred Flowers movement
2. Study of Mao's works
3. First Five-Year Plan (continued)
- 1957: 1. Study of philosophy (for the masses)
2. Working on experimental plots
3. Nation-building through diligence and austerity
4. Ideological rectification (thought reform)
5. Study of Mao's *On the Internal Contradictions among People*
6. Anti-rightist movement
- 1958: 1. Great Leap Forward
2. General line in socialist construction (to go all out, to aim high, and to achieve greater, faster, better, and more economical results in building socialism)
3. Debate on being Red and expert
4. Thought reform (anti-waste, anti-conservatism)
5. Backyard Blast-Furnace movement
6. *Tatsepao* (posters)
7. Turn over the heart to the Party
8. Study of Mao's works
9. Participation of all people in industrialization
10. Communes
11. Integration of education and labor
12. Contribution of foodstuffs
13. Socialist and government education movement among armed forces
14. Dispatching cadres to the countryside
15. Physical fitness
16. Development and management of educational and cultural offices of the whole Party and whole people
17. Second Five-Year Plan
- 1959: 1. Struggle for the big leap forward in science and technology
2. Every-person-gathers-10,000-catties-of-fertilizer
3. Struggle for 18,000,000 tons of steel
4. Participation of armed forces in production
5. Increase production and practice austerity
6. Second Five-Year Plan (continued)
7. Study of philosophy (continued)

8. Walking on two legs
9. Deep plowing and dense planting

The Three Categories of Campaigns

Generally speaking, there are three categories of mass movements. First, there are campaigns that involve some form of *tou cheng*, or struggle, against certain classes or groups of people (such as the elimination of landlords in the land reform movement), certain social systems or practices (such as the "liberation of women from feudalism" in the New Marriage Law movement of 1950) or certain ideologies (such as revisionism, opportunism, or rightism in the anti-rightist campaigns almost immediately following the Hundred Flowers movement). Second, there are periodic campaigns that aim at increasing production. These are mainly the labor emulation drives, including both the regular ones that go on all the time in the country and such dramatic ones as the Great Leap Forward, in 1958, and different "increase production and practice austerity" campaigns in different years. Third, there are campaigns that are designed mainly for the purpose of ideological rectification, in addition to regular *hsueh hsi*, or study programs.

The objectives or intentions of these campaigns are not always easy to determine. To a certain extent, almost all campaigns are production-oriented. For instance, production is stressed even in the campaign to study the New Marriage Law. Article 8 of the law states that "husband and wife are duty bound to love, respect, live in harmony, engage in production. . . ." Or take the much-publicized Backyard Blast-Furnace movement, in 1958. Most observers in the West considered it a *fisaco* as a campaign to produce iron and steel. But plenty of Chinese Communist writers have hailed it as a successful method of eliminating the "superstitious belief" among the masses that industrialization or, in this case, the production of iron and steel, could be handled only by trained scientists, great factories, and Western technology. Viewed in this way, the campaign was mainly ideological or political rather than economic.

The Tactics of Campaigns

Chinese Communist tactics of propaganda and agitation vary in different movements, and no cut-and-dried formula is followed. They do follow, however, a reasonably consistent general operational pattern. This pattern has at least been followed in such major campaigns as the land reform, in 1950-52, suppression of counterrevolutionaries in 1952, various ideological remolding campaigns from time to time, and some of the recent drives to promote "technological revolution" and "cultural revolution" as part of the general line of socialist construction.

Generally, there are four stages in a campaign or movement. The first stage is attention-attraction; the second, ideological preparation; the third, action-taking; and the fourth, review of the campaign. Briefly stated, the operational pattern is something as follows.

Stage One: *Attention-Attraction*. 1. Very obviously, the objective to be achieved in this stage is to get the masses or the targets of a movement acquainted with the campaign. Those who are mobilized for the campaign must understand the basic issues involved, the necessity of carrying out the campaign, the "enemies" (in struggle campaigns), problems (in labor-emulation drives) or "erroneous ideologies" (in thought-reform movements) to be eliminated, the causes of contradictions, the friends or allies to be won over, and the outcome or gains to be expected from the campaign.

2. The general principle to be followed by all cadres and propagandists in this stage is to carry out the campaign "with fanfare," which literally means "in the open, with banners and drums."

3. General methods of communication. (a) Local Party leaders go out to speak to the masses. In the early period of the Peking regime, there was the system of "reporters," who were usually important local government or Party officials. More re-

cently, collective listening to radio seems to have replaced listening to the speeches. However, large mass rallies are always staged. As a former Chinese Communist Party member told me in Hong Kong, rallies are one of the most important battlegrounds of Chinese Communist propaganda. (b) All local cadres and propagandists try to make clear the policies of the government and Party to the people in their own "surroundings." In most cases, the propagandists choose their own methods or channels of contact, and these usually range from formal rallies to casual conversations; it is not at all unusual for propagandists to call on people in their homes to have a "heart-to-heart talk." The establishment of communes has somewhat facilitated contact, since mess halls, though abandoned in many areas for eating purposes, are generally used for propaganda meetings. (c) All mass media, including newspapers, radio, pamphlets, *tatsepao* (posters), blackboard bulletins, wall papers, plays, operas, movies, vaudeville, and magic-lantern shows are used to focus attention on the campaign. (d) Local "activists" are discovered who are in turn used as a bridge between the Party and the masses. Similarly, people are also sought who can be identified as victims of the "enemies" to be eliminated in the campaign and used as "living examples." This is generally considered the most important propaganda method and approach because it makes the propaganda not only understandable but also real to the broad masses.

Stage Two: Ideological Preparation. More and more meetings are held at this stage. The main tasks are as follows.

1. Study of policies. This means the study of the directives, announcements, important speeches, or editorials of newspapers with regard to the campaign being carried out. The studying is done in study groups, newspaper-reading groups, production teams, or whatever group is designed for the purpose of indoctrination. Propagandists who lead such study are armed with directives from higher authorities and with reference materials, such as handbooks for propagandists. Special pamphlets are generally made available. If not, local newspapers usually reprint the important documents required for the campaign.

Intensive study and long discussions are required for such documents.

2. Thought-revealing. The word "revealing" is *chi fah* in Chinese. The two Chinese characters mean more than just to reveal; they mean "to draw out"; they suggest some sense of enticement. An inflexible rule in this step is to have everyone talk. This is to expose the mental processes of all participants, and, psychologically speaking, talking helps one indoctrinate oneself. It remains for the propagandists or the political workers to give a "correct interpretation" of the ideologies existing in the minds of the masses. In more exact terms, it is the propagandists who make the people understand why and how they should do their share in the campaign.

In *tou cheng*, or struggle campaigns, there is normally a good deal of accusation or what the Chinese Communists call "grievance-telling." This is to intensify the hatred of the masses against the "enemies" (either persons or systems) defined by the Party, and to transform the hatred into a fighting force. Every participant in the campaign is supposed to "pour out his grievances." During the Land Reform movement, for instance, the Communist slogans were: "Spit out all your bitter water," and "Scoop out all bitter roots." Those who initiated the accusation process were generally the "activists" or "aggressive elements" who had already been trained.

Stage Three: *Action-taking*. This is usually the climax of the mass movement. When hatred by the masses reaches its height and a state of mass hysteria is created, actual struggles or action begins to take place. In such early campaigns as land reform, the people were asked to inform on the guilty landlords, many of whom were often shot or executed on the spot. The executions themselves, as the Communists call them, are "living education." In labor-emulation drives, the action to be taken means generally pledges to work still harder and have still more and better results in production.

Stage Four: *Review of the Struggle*. The major tasks at the closing stage of a campaign are generally (1) to study possible

remaining "enemies" or problems; (2) to study the level of "political consciousness" achieved by the masses; (3) to study the strength of the masses in carrying out the campaign; and (4) to study the appropriateness or correctness of the policies concerning the campaign.

This stage generally starts shortly after the masses take up the desired action in a campaign. Newspapers and magazines begin to publish reports of the experiences gained elsewhere and recommend the use of such experiences in other areas. Such information is also made available in the handbooks or other publications specifically prepared for propagandists.

There is one very important by-product of every campaign as far as the Party is concerned. This is the discovery of new "activists," whom the Party may call upon for service in later campaigns.

The Case of an Education Campaign

The foregoing is only a general description of how most mass movements are carried out. We now turn to an actual case of how the current socialist education campaign has been carried out in a small village and how various communications sources have been utilized.

This is a village in Kwangtung. (Its name is withheld to protect the informant.) The time: spring, 1964. The source: a refugee who participated in the campaign as a teacher, a local cadre, and captain of a production brigade. He fled to Hong Kong in May, 1964, and I interviewed him in July. The following is a summary of his story.

In January, 1964, the village had a population of 750. There were about 130 families who were organized into nine production brigades.

The Socialist Education in the Countryside campaign started in January. But several weeks before the campaign was under way, both the local Party secretary and Youth League secretary had gone to the city to receive their training and briefing for the campaign. When they returned to the village they were already armed with piles of propaganda-education materials pre-

pared by the Party's regional propaganda offices and by the county propaganda department. They included mainly posters, pictures (of Mao Tse-tung), various types of reading material, and panels for peasants to decorate their homes and to welcome the New Year. In traditional China, such panels were usually pictures of gods. The Chinese Communist panels did not differ in format. Even the paintings were done in traditional Chinese style. Only the subject matter on the panels was different. Instead of gods, there were faces of happy peasants supposedly enjoying the happy life in a new China.

On January 3, the Party secretary summoned a mass meeting where the objectives and procedure of the entire campaign were carefully explained.

The following day, a special "exhibition of social classes" was held, showing objects such as old IOU's and loan slips of poor peasants, old deeds of landlords, poison and colorless ink (supposedly used by KMT secret agents), and daggers and pistols (of landlords and "bad elements"), etc.

By this time the "propaganda outline" prepared by the local propaganda department was being distributed to every production brigade, and small group meetings were being held.

On January 5, a mass meeting was held with fanfare. This was supposed to be the official kickoff of the campaign. There were more speeches, demonstrations, and exhibitions showing all the "evils of the old society," and, of course, more meetings and more discussions.

The campaign lasted about three months. My informant participated in 108 meetings of various kinds. Some of the meetings were day-long affairs, and a few went on past midnight.

One of the most important media used in this campaign was the *tatsepao* (posters). They were all over the village. Those who were illiterate asked others who could write to produce a few sheets of *tatsepao*. A number of school children helped with the writing of *tatsepao* for some of their relatives and illiterate villagers.

The other important media used in the campaign were blackboard newspapers, which were edited by the local teacher, and wall newspapers. There was to be a correspondent in every

production brigade. The wall newspapers carried brief reports and occasional drawings depicting villagers in different brigades carrying on the campaign.

There were many personal visits made by cadres to individual homes to talk about "elimination of capitalist ideologies and strengthening of the ideology of the proletariat."

Grade-school children participated in the campaign by producing a few street-corner shows and singing (with songs supplied by propaganda departments) at different occasions.

A special movie was shown in a theater in a nearby town, and attendance was mobilized. They discussed the movie later in study groups.

The mobile projection which came normally to the village once a month put on two shows a month during the campaign.

In the square at the center of the village, there were four loudspeakers. Broadcasts started at 6:30 A.M., and they included such programs as news, Chouchow songs (a special Kwangtung folk music), talks by cadres, announcements, preparations for the campaign, children's program, Peking opera, "good men, good deeds" (praising the aggressive or advanced elements in the village), agricultural knowledge, production news, criticisms and self-criticism, etc.

A special "cultural station" was set up for the people to read newspapers, magazines, comics, and books that were not normally available in the village.

Newspaper-reading groups met more often during the campaign. There were eight to twelve people in each group. Discussion followed each newspaper-reading session. The people were not required but "persuaded" to attend the sessions.

There were three days during the campaign when no work went on in the village, for everyone had to attend the meetings. (This is normally the case during the "high tide" of any campaign.)

This campaign, according to my informant, was unusually mild in comparison with other movements. No individuals were singled out as targets for *tou cheng*, or struggle. No rightists and, as my informant puts it, no "focal points" (which in the Chinese is *tsun tien*, referring to individuals with serious

ideological problems) were identified. And there were no fierce accusation meetings.

There were a number of dramatic "memory meetings" for the participants to "recall" the "sufferings under the old days." The "odious histories" of some of the landlords, hoodlums, and "bad eggs" who had already been eliminated in earlier campaigns were once again reviewed and discussed. And in most cases, according to my informant, there was just about as much drama and tension in such meetings as in regular accusation or struggle meetings.

Another Case: A Production Campaign

Now another illustration of the use of mass movements to spur production. This is the story of the use of campaigns in a colliery as it is told by the Communists in the *Peking Review*.⁷ The Communist version is presented here mainly because it is typical of the thousands of stories which flood publications on the mainland.

The Chinghsi Colliery, with its seven pairs of shafts, looks like many other collieries in the country, but it is outstanding in the way it has kept up the drive of the general line, going all out and aiming high, and getting greater, faster, better and more economical results in a consistent advance month after month, year after year. In 1960, the Chinghsi miners fulfilled their annual production plan a month ahead of schedule. . . .

Many things went to make these achievements possible. One of the important factors is the excellent way the mass movement had been led by the Communist Party organization at Chinghsi. Whether in boosting output, carrying out technological innovations or conducting scientific research—the Chinghsi Colliery has put a big effort into organizing mass movements which give full rein to the initiatives and creativeness of workers and staff. . . .

When you ask about mass movements in Chinghsi, you are certain to hear the experiences of the Datai shafts cited. The Datai is a comparatively young mine. Its pair of shafts was

⁷ *Peking Review*, June 9, 1961.

commissioned only after the big leap forward year of 1958. Yet despite its modern equipment, previous to 1960 it barely managed to fulfil its monthly quota. Many of the workers were new at the job and lacking in production experience. . . .

A bit chagrined at first, the Datai miners determined to make good. All agreed, after discussion, that the best way was to launch a mass, socialist emulation campaign which would embrace the whole work force, give full play to each worker's initiative and spread the best experience around.

That was at the beginning of 1960. Since then, one mass movement after another has carried Datai output steadily upward.

In their battle for higher output, the Datai miners introduced many ingenious and effective methods of emulation. The tunnelling brigades, for instance, initiated the kind of emulation which they call a "production tournament." After the fashion of a sports meeting, targets were set for the winners, runners-up, and others who placed. The idea caught on and gave zest to the workers. Results were quick and remarkable. Tunnelling for the first month after launching this mass movement outstripped that of the preceding month by more than 40 percent. . . .

(The story goes on to tell how the mass movements helped the workers improve their methods of production.)

The Datai way of mass advance is typical of the manner the whole Chinghsi Colliery has forged ahead. Last year a dozen ways of organizing emulation were evolved and tried out. Some helped mobilize the miners to go in for mechanization or semi-mechanization by modern or indigenous methods, others rallied them to put through technological reforms and merge or shorten work processes; still others were connected with improvements in tools, etc. These emulation campaigns were conducted sometimes between pits, sometimes between production groups and sometimes on a worker-to-worker basis.

How much truth there is in such an obviously propagandistic story is beside the point. What is significant is the clear and simple message from the Party that technical innovations and technical revolution are no longer matters monopolized by trained scientists or engineers, that common laborers once "lib-

erated from feudalistic and capitalistic pressures" are capable of handling technological problems, that all great things are possible if people are determined to work hard, and that mass movements are the best method and instrument to bring out "collective revolutionary wisdom" and "creativity of the workers."

It was during the Great Leap Forward, in 1958, when the Party started the policy of using mass movements to promote science and technology.⁸ The Party gave three reasons for this policy: "(1) to accelerate the completion of the large amount of work needed for the research work in the development of science and technology; (2) to accelerate the production and development of scientific and creative research; and (3) to guarantee the integration of theory with practice."⁹

This is typical Chinese Communist jargon. In plain English this means that through the mass movements China's millions would be mobilized to carry out tasks that would yield some useful and needed data for science and technology; and that trained scientists would be familiar with the practical needs of the masses and that the masses would acquire some scientific knowledge.

There is a bit of a semantic problem here. The Party's programs of technological revolution, which is supposed to be one of the important tasks of the general line of socialist construction, do not intend to turn millions of Chinese into trained physicists or chemists. The sort of scientific and technological work which the Communists expect to accomplish in the mass movements is on an entirely different order. It involves mainly the popularization of scientific knowledge. The most important task prescribed by the Party is the improvement of farm tools. This is what the Communist propagandists call the "bud in technological revolution in agriculture."¹⁰

As a result of various mass movements, countless "scientific

⁸ Yu Kuang-yuen, "On Mass Movements in the Realm of Science and Technology," *Hung Chi* (Red Flag, Peking), no. 3 (February, 1960): 17-24.

⁹ *Ibid.*, p. 17.

¹⁰ *Chi-Shu Ke-Min Wen-Ta* (Questions and Answers on Technical Revolution) (Peking: Popular Reading Material Publishing House, 1959), p. 12.

institutes," "science committees," and "research institutes" have been established in the countryside since 1958. Almost overnight illiterate peasants found themselves to be "research workers"; many became "inventors." Nieh Jung-chen, one of Mao's top planners, declares:

A mass campaign for mastering science and technology has been in progress in many large and small industrial and mining enterprises and people's communes, and this has resulted in countless numbers of new research bodies and laboratories being set up. Practically every new city and township in the country has a branch and members of the All China Association of Science and Technology. The needs of socialist construction have encouraged millions of people to go in for science and technology, and now we are witnessing a great upsurge of enthusiasm for the study of science.¹¹

Teng Tse-hui, another top Peking official, reports:

Mass peasant enthusiasm for production was accompanied by initiative in reforming farm tools. The campaign to popularize two-wheeled, double-shared ploughs and other new farm tools surged up as early as 1958. Many more improved farm tools were created by the peasant masses in 1958, when a total of more than 210 million such implements were manufactured and put in use. We can see that the popular campaign for production led to a new one for technical innovation.¹²

These quotations are cited not because of the reliability of the statistics. They are presented merely to suggest the seemingly intensive effort made by the Party to make a start in introducing innovations in agriculture through mass movements.

One other matter about the mass movements in technological revolution is worth mentioning: the Party's determination and shrewdness to "explode the mystery of science" and to create a new relationship between scientists and the masses. In almost every mass movement in the realm of science and technol-

¹¹ Nieh Jung-chen, in Teng Hsiao-ping, *Ten Glorious Years*, p. 330.

¹² Teng Tse-hui, "The Socialist Transformation of Agriculture in China," *ibid.*, p. 323.

ogy, the Chinese Communists go to the extreme lengths "to topple the idols of superstitions" and "to emancipate the minds" of the masses. To quote Nieh again:

In the past, quite a number of people in the fields of science and technology had an attitude bordering on the superstitious with regard to foreign things and an indiscriminating worship of authority that constricted their minds and prevented them from going in for original research and bold enterprises. Many people looked on science and technology as something so difficult as to be beyond their ken and they shrank from it.¹³

Nieh called rightists those who "clamored that 'laymen cannot lead experts,' who insisted 'science for science's sake,' " and those "who denied that the sacred duty of science is to serve socialist construction." As one can readily see, such mass movements are necessarily political and ideological. They serve the function of humbling the scientists to accept the leadership of the proletariat, and at the same time removing the inferiority complex of the masses and establishing their confidence in themselves as the masters of the new society.

It should perhaps be noted in passing that all this is in line with the Maoist concept of knowledge. Long before he became ruler in Peking, he wrote:

What is knowledge? From ancient days down to the present time, there have only been two kinds of knowledge: one kind is the knowledge of the struggle in production; the other is knowledge of the class struggle, including the knowledge of national struggle. Is there any other type of knowledge? No. Natural science and social science are simply the crystalization of these two kinds of knowledge. Philosophy is then a generalization and summary of natural and social sciences. Besides these, there is no other kind of knowledge.¹⁴

¹³ Nieh Jung-chen, *ibid.*, p. 337.

¹⁴ Mao Tse-tung, "Reform in Learning, the Party, and Literature," in *Cheng Feng Wen Hsien (Documents of the Party's Ideological Remolding Movement)* (Hong Kong: Hsin Min Shu Chu Pan She, 1949), p. 12.

How Effective Are the Campaigns?

One necessarily wonders at this point how effectively the mass movements have served Peking's development plans. This is a rather difficult question to answer because there are many different mass movements, and there are different ways of examining them. For instance, if one were to look at the Great Leap Forward as strictly a program in economic development, he would consider it a miserable failure. But if one were to see the movement as a test of Peking's ability in mobilization, he would be enormously impressed. The backyard blast furnaces in 1958 are usually ridiculed in the West as a fiasco in industrialization. But the Chinese Communists did not merely aim at producing iron and steel in the movement; they aimed also at producing new men with a new point of view about industrialization.

It is both difficult and unwise to assess Peking's performance in development in terms of any particular mass movement. Every mass movement in Communist China is in one way or another related to a number of other mass movements. What appears to analysts outside China as a distinctly separate campaign is usually a continuation or modification of another movement.

Take the communes, for example. This is easily one of the most dramatic mass movements in Communist China. The prevailing view in the West is that the movement has failed. And it has, if one judges the movement in terms of the apathy and resistance of the masses. But the Peking regime has not abandoned the communes, and there is no sign that it will.

Mao and his comrades look at the communes quite differently. To them, this is a part of a much bigger mass movement in economic development which they started immediately after they proclaimed their new regime in Peking in 1949. Communization had been very much on their mind long before they became China's new masters. But 1949 was too early for such a drastic movement, and the Communists were careful not even to whisper about this part of their policy. The correct policy

therefore was the Land Reform movement. After that came the movement of mutual aid groups. After that, the movement of collective cooperatives. After that, the campaign to combine small co-ops into large co-ops. After that, more campaigns of more ambitious programs of collectivization. And, finally, the communes.

In 1959 when Teng Tse-hui, one of Mao's top planners, reviewed the general course of the Party's development policy in agriculture, he referred to the Land Reform movement only as a campaign that "created preconditions for the Socialist transformation of agriculture." He went on to say:

The socialist transformation of agriculture in China follows closely on the heels of the land reform. In the winter of 1952 land reform was in the main completed throughout the country. In 1953 the Central Committee of the Party and Comrade Mao Tse-tung put forward in good time the Party's general line for the transition period and took the "Decisions on the Development of Agricultural Producers' Co-operatives." Subsequently, between the winter of 1955 and the spring of 1956, lower stage cooperation was in the main completed throughout the country. In the winter of 1956 a quick advance was made to the higher stage. Thus, by "striking the iron while it was hot," we quickly switched the democratic revolution, after the land reform, to the socialist revolution in the countryside, prevented any large-scale development of capitalism in the rural areas and lessened the resistance to the revolution.¹⁵

The Party, according to Teng, took up communes only because and after the nation was "organizationally prepared." He did not exactly say that the nation was *ideologically* prepared, for this was something to be done during the movement of communization.

Viewed in this way, the movement of communization is a continuation of the Land Reform movement. Both are parts of still another mass movement which is still going on.

It is often remarked that the Chinese Communists use a guerrilla warfare approach to nation building and that mass

¹⁵ Teng Tse-hui, "The Socialist Transformation," pp. 305-6.

movements are methods of revolution rather than tools of development. As a matter of fact, this criticism, according to publications in Peking, is often raised by the Communists themselves. Chou En-lai, for instance, issued a long report to answer this criticism: "Is it true that adoption of the method of mass movements in building socialism is 'petty-bourgeois fanaticism,' that it would only 'bring greater and faster but not better and more economical results?'" His answer was, of course, predictable. He accused those raising such a question of implying "mistrust in the masses, fear of the masses and slander of the masses."¹⁶

Another Communist leader reports another set of criticisms made within the Party against the mass movements:

There has been quite a bit of argument within our Party over the question of launching large-scale mass movements in socialist construction and, above all, on the industrial front. Some say that "mass movements are all right for revolutionary struggles but not for construction." Others say that it is a rather complex thing to run modern industry and in this respect, instead of organizing mass movements, we should establish a "regular regime." Still others say that mass movements may be all very well in carrying out political reforms in factories and enterprises, but that in carrying out technical reforms we should rely on systematic, "scientific methods" instead of mass movements, and so on and so forth. Their basic standpoint is that the Party's mass line in socialist construction should be replaced by a set of "regular" methods, and lively and vigorous movements by bare administrative orders. They even call their methods "normal," "scientific," truly Marxist-Leninist method and call mass movements "abnormal," "unscientific" methods which, according to them, run counter to Marxism-Leninism.¹⁷

To the Peking leaders, such criticisms are, of course, "posterous" and can only stem from "lack of understanding of the mass line" and from "serious right opportunist ideas." Their defense:

¹⁶ Chou En-lai, "A Great Decade," in Teng Hsiao-ping, *Ten Glorious Years*, p. 60.

¹⁷ Ko Ching-shih, "Mass Movements on the Industrial Front," *ibid.*, p. 192.

It is the revolutionary mass movements that constitute the most normal revolutionary order and the most scientific method of leadership. The error of those with right opportunist ideas lies in the fact that they refuse to acknowledge the enthusiasm and initiative of the people in the work of construction. In opposing large-scale mass movements in building socialism they are, at bottom, opposing the Party's general line, *since the basic starting point of that general line is to rely on the inexhaustible energies of our 650 million people* and on their endeavour to go all out, aim high and achieve greater, quicker, better and more economical results in building China into a great socialist country.¹⁸

The meaning is abundantly clear. At the heart of Peking's development policy is the conviction of the Communist planners that what really counts in nation building is man rather than material, morale rather than machine, and "revolutionary spirit" or "socialist activism" of the masses rather than the tools and techniques in science and technology. They believe, apparently, that if they can mobilize and manipulate the energy and enthusiasm of the millions in China they can overcome every difficulty in transforming an old agrarian China into a modern, industrial power.

Mao is dead serious when he writes, "Man is the most precious of all things in the world. Under the leadership of the Communist Party, all the wonders of the world can be created so long as manpower is available."¹⁹

For an overpopulated country such as China, Peking's approach to nation-building perhaps makes a good deal of economic sense. Very obviously, the real wealth of China is people, and the Peking planners are being practical minded about utilizing their best resources. As one recent Western visitor to Red China puts it: "The Communists in China have one advantage many countries lack. If one man can't do the job, they get two; if five hundred can't finish a building in the planned time, they put on another thousand. Set hundreds of millions

¹⁸ *Ibid.*, p. 193; italics mine.

¹⁹ *Jen Min Jih Pao*, September 17, 1949.

of people to work for low wages, and there must be development.”²⁰

It is in the nature of the Chinese Communist ideology to insist that the Party should not rule by “commandism” (i.e., to rule by issuing orders) or “tailism” (i.e., to blindly follow the tail or wishes of the masses), but by developing gradually and systematically the consciousness of the masses. The Party cannot be content with people who are unable or unwilling to display a high degree of “political consciousness” in their work, even though they are professionally competent and politically reliable. It cannot tolerate “the purely economic viewpoint or the viewpoint of simple development of production.” It requires every participant in every task of every mass movement to understand fully “the political significance” of the work, to “grasp firmly the viewpoint of the proletariat,” and to pledge to accomplish every task with “all-out skyrocketing revolutionary zeal.” In short, it demands enthusiastic support, not just passive obedience. It insists on producing converted collaborators, not just silent followers.

This is why Mao’s dictum that “political work is the lifeline of all economic work”²¹ is followed almost reverently as the main scripture on nation building in China. And this is why Liu Shao-chi, China’s chief of state, constantly has to tell the nation:

Ideological and political work should forever be the soul and commander of all our tasks. . . . There are those who say that ideological and political work can produce neither food nor coal and iron. This is the viewpoint of those who see trees but not forest. Just ask yourself: haven’t we produced more food, more coal and more iron after we have formulated and carried out our political doctrine, correctly settled the internal controversies among people and elevated the socialist consciousness of our working masses?²²

²⁰ Frederick Nossal, *Dateline-Peking* (London: Macdonald, 1962) p. 15.

²¹ Mao Tse-Tung, *Tsu Tso Hsien Tu (Selected Readings of the Works of Mao Tse-Tung)* (Peking: Chinese Youth Publishing Co., 1964), p. 210.

²² Liu Shao-chi, *Chung Kuo Kung Tsan Tang Chung Yang Wei Yuen Hui Hsiang Ti Pa Kai Chien Kuo Tai Piao Ta Hui Ti Erh Chih Hui Yi Ti Kung*

Such Communist pronouncements are not always taken very seriously by analysts of Chinese affairs. And they have yet to arrest the serious attention of many Western economists studying China's economic problems. This is understandable, for, after all, "class consciousness" and "revolutionary spirit" are not variables that fit very neatly or easily into many theories of nation building or models of economic development.

Yet it is essential that we grasp the underlying motivations of the Chinese Communists when we seek to understand the workings of mass movements on the mainland. These movements, we can be sure, are not designed merely to persuade the population to take specific actions. They aim at something far more profound than that. They aim at producing transformation in values and personality. They aim at making aggressive and activated revolutionaries out of the millions of unconcerned and conciliatory peasants, workers, and common people.

The planners in Peking are explicit about one thing: the prerequisite for the building of a new socialist nation is the creation of new socialist men.

This is a rather uncommon, if not unique, development policy. It is an approach in revolution rather than a method in development. This should be easily understandable. For China is still possessed by the agonies and ardors of a revolutionary period, and it is governed by men who can only think and plan in terms of a revolution.

Tso Pao Pao (Report of the Central Committee of the Chinese Communist Party to the Second Session of the Eighth Congress) (Peking: People's Publishing Co., 1958), p. 35.

DANIEL LERNER

*Toward a Communication Theory
of Modernization: A Set of Considerations*

Daniel Lerner, who is Ford Professor of Sociology at M.I.T., wrote one of the first influential volumes on the role of information in economic and social modernization. This was *The Passing of Traditional Society*, 1958. In the present paper he systematizes his later thoughts about where communication belongs in economic and social development. One of its takeoff points is William James's coefficient of satisfaction (achievement divided by aspiration), and Lerner develops from that his often-quoted warning that although communication can help to bring about a revolution of rising expectations, this can be followed by a revolution of rising frustrations if the desired changes do not come about. This paper is from Daniel Lerner, "Toward a Communication Theory of Modernization: A Set of Considerations," in *Communications and Political Development*, edited by Lucian W. Pye, Social Science Research Council (copyright 1963 by Princeton University Press; Princeton Paperback, 1967), pp. 327-50. Reprinted by permission of Princeton University Press and the author.

IN THE CITY of Teheran, in 1954, there were thirty-six registered "film companies." Only one of these companies had actually produced, distributed, and exhibited any films; the other thirty-five had yet to complete production of their first film.

How did this odd situation come about? The sequence of events begins at Teheran University, where the old traditions of Iranian learning and the new demands of Iranian modernization are locked in a deadly struggle, from which there issues annually a horde of distorted and disfigured progeny called "graduates." These are the young men who, under the compulsion to maintain or attain an elevated social status, attended or evaded four years of magistral lectures and passed a final examination. They have acquired certain standard adornments—i.e., acquaintance with Persian history and Shariya law, familiarity with the glories of Persian art and poetry, certified by the abil-

ity to quote yards of Firdausi and appropriate stanzas of Saadi.

These young men are all dressed up—but they have no place to go. They are much too numerous to be absorbed into the traditional social orders represented by government, army, priesthood. Already the Iranian government periodically discovers itself unable to meet the payroll of its swollen bureaucracy. Nor is Iran developing an adequate supply of new occupations deemed fitting for college graduates. These graduates face only the bleak prospect of unemployment and underemployment. Accordingly they seek to occupy themselves in ways that will be amusing if not rewarding. A half-dozen such graduates organize themselves around a 35 millimeter camera and form a "film company." But their outlook is dismal. Most of them will never produce a film; those who do will never be able to market it. It is unlikely that, even if they wish to show it free of charge, their film will ever be seen beyond their circle of friends. There are few cinemas in Teheran, and they are for commercial hire. Frustration and failure thus await most young Iranians who seek to make a career in the mass media.

The key factor in this unhappy situation is the uncertain and inadequate tempo of Iranian modernization. The supply of new life-opportunities does not keep pace with—is indeed steadily outpaced by—the burgeoning demands of the new literates. In 1958 I summarized the Iranian situation in the following terms, which remain cogent in 1962:

Incorporation of new men is no easy task in a non-growth economy. Iran develops few of those constantly growing and changing occupational holes which embody young men in the elite structure. The clergy, the military, the bureaucracy—all these are charges on the public treasury, already overburdened and scarcely capable of expansion. The teaching corps is pitifully inadequate, but unlikely to multiply opportunities until Iran develops a modernizing economy in which literacy is an essential skill. Without an expanding business sector, there is little room for the lawyer and accountant, for the specialist in industrial management or labor relations, for the insurance broker or the investment manager, for the account executive or the public relations counsel. Advertising is stillborn and the

mass media abortive. Where in Iran is "the man in the gray flannel suit"? Whatever his unpopularity among Westerners wearied by opinion brokers, in Iran he would be a more useful stimulus to modernization than the agitational intellectual in a hairshirt of vivid hue.

Given its limited absorptive capacity, Iran suffers from an overproduction of intellectuals. In a society about 90 percent illiterate, several thousand young persons go through the classical routines of higher education each year. Learning no skills that can be productively employed, these collegians seek outlets in the symbol-manipulating arts toward which their humanistic studies have oriented them. Their effort supplies a poignant instance of usable training rendered useless by its social environment—newspapers without readers that last a week or a month, film companies that never produce a film. The mass media, as distinctive index of the Participant Society, flourish only where the mass has sufficient skill in literacy, sufficient motivation to share "borrowed experience," sufficient cash to consume the mediated product. In Iran the mass media are anemic and with them, annually, die a thousand hopes.¹

The thousand hopes that die in Iran each year are multiplied into millions throughout the underdeveloped countries around the world that exhibit communication malfunctioning in their efforts to modernize. What is the common mechanism underlying these numerous cases where the communication gears fail to mesh with the motor of modernization? Various formulations have been offered us in the excellent chapters in this book. Each points to essential factors in a comprehensive theoretical understanding of the interaction between communications and political development. No paper achieves such a comprehensive theoretical understanding—a statement of such force as to suffuse us with the beautiful feeling of perfect illumination—as does a Newtonian account of the solar system as a *gravitational* system or a Wienerian account of all systems as *entropic* systems. It may be prudent at this stage of our knowledge about communication systems and social systems to aim at something less than this. The present effort is only a

¹ Daniel Lerner, *The Passing of Traditional Society* (Glencoe, Ill.: The Free Press, 1958), p. 362.

set of considerations drawn from an incomplete theoretical base.

The theoretical base of this paper is the proposition that modernity is an interactive behavioral system. It is a "style of life" whose components are *interactive* in the sense that the efficient functioning of any one of them requires the efficient functioning of all the others. The components are *behavioral* in the sense that they operate only through the activity of individual human beings. They form a *system* in the sense that significant variation in the activity of one component will be associated with significant variation in the activity of all other components.

The terseness of these definitions should not obscure the amplitude of the proposition, which is coterminous with the basic theorem of behavioral science—namely, that the operation of a social system, or subsystem, can be accounted for by the statistical distribution of behavioral components among its members. Thus a society operates its polity as a representative democracy if a large fraction of its members are qualified to vote, and regularly do vote, in elections that actually decide which of several competing candidates shall occupy the offices authorized to make decisions on specified issues of public policy. Thus a society operates its economy under capitalism in the measure that its members are free to decide how they shall use their own savings in order to maximize their own wealth. The statistical distribution of items that form the index—i.e., components of the system—determines how we characterize a society.

There is much that remains to be clarified in the behavioral conception of society. But it does, even in its present condition, authorize systematic efforts to locate linkages between personal and aggregative behavior, to establish reciprocity between individuals and institutions, to associate samples with systems. Operating on this authorization, this paper will seek to clarify how and why it comes about that the mass media function effectively only in modern and rapidly modernizing societies. We know empirically that this is so. Here we wish to develop further the idea that media systems and social systems have

“gone together so regularly because, in some historical sense, they *had to go together*.”²

The New Revolution of Rising Frustrations

These considerations arise from reflection on the course of the developing areas over the past decade. It has not been a smooth course nor a consistent one. It has falsified the predictions and belied the assumptions of those who foresaw the coming of the good society to the backward areas. Among its casualties has been the assumption that if some particular input was made—i.e., investment capital, industrial plant, agricultural methods, entrepreneurial training, or any other “key factor” preferred by the analyst—then a modernization process would be generated more or less spontaneously. This is a serious casualty. As the editor of this volume has aptly written in his introduction: “Faith in spontaneity died soon after the first ex-colonial people began to experience frustrations and disappointment at becoming a modern nation.”

This bitter experience is new to us and requires careful evaluation—particularly by those among us who want the defeats of the past decade to help prepare the modest victories that may still be hoped for in the next. The decade of the 1950's witnessed the spread of economic development projects around much of the world. This process of reviving cultures, emerging nations, and new states was widely characterized as a “revolution of rising expectations.” People throughout the backward and impoverished areas of the world suddenly acquired the sense that a better life was possible for them. Now leaders arose who encouraged their people to believe in the immanence of progress and the fulfillment of their new, often millennial, hopes. A great forward surge of expectancy and aspiration, of desire and demand, was awakened during the past

² *Ibid.*, p. 438. See also Daniel Lerner, “Communication Systems and Social Systems,” *Behavioral Science* 2, no. 4 (1957); Gabriel A. Almond and James S. Coleman, *The Politics of the Developing Areas* (Princeton: Princeton University Press, 1960), p. 536; Lucian W. Pye, *Politics, Personality, and Nation Building* (New Haven: Yale University Press, 1962), p. 15.

decade among peoples who for centuries had remained hopeless and inert. This forward feeling was shared by those of us whose unchanging task is to understand.

A significantly different mood characterizes our thinking about the decade before us. While rising expectations continue to spread around the underdeveloped world, those of us who retain our interest in comprehending or programming rapid growth have learned that the ways of progress are hard to find, that aspirations are more easily aroused than satisfied. There is a new concern that the 1960's may witness a radical counter-formation: a revolution of rising frustrations. Observers have had to temper hope with prudence, for the limits on rapid growth have become more clearly visible through our recent experience. There is a seasoned concern with maintenance of equilibrium in societies undergoing rapid change. Soberly, responsible persons now tend to look for guidance less to ideology than to theory, less to dogma than to data. A new era of systematic research into the mysteries of modernization has opened.

Any restless area presents social research with an excellent opportunity to meet the need for a theoretically sound, empirically based exposition of the process called modernization. To be sure, there are particularities in each situation. Particularities can be wedded to generalizations, however, if we focus social research in any area upon those aspects of the process which it shares with other regions of the world that are seeking to accompany rapid economic growth with rapid social change. The political function in this process is to maintain stable controls over these rapid changes—i.e., to preside over a dynamic equilibrium.

In these terms there are two main sets of problems that confront the development process everywhere: mobility and stability. By mobility we mean the problems of societal dynamism; by stability we mean the problems of societal equilibrium. Mobility is the agent of social change. Only insofar as individual persons can change their place in the world, their position in society, and their own self-image does social change occur. Social change is in this sense the sum of mobilities acquired by individual persons. (In a more precise sense, as we shall see, so-

cietal equilibrium can be expressed as a ratio between individual mobility and institutional stability.)

It is fairly well established that a systemic relationship between the major forms of mobility—physical, social, and psychic—is required for a modern participant society. As to sequence and phasing, we have only the Western experience to serve as full-scale model. Historically, in the Western world mobility evolved in successive phases over many centuries. The first phase was *geographic* mobility. Man was unbound from his native soil. The age of exploration opened new worlds; the age of migration peopled them with men transplanted from their native heath. The second phase was *social* mobility. Once liberated from his native soil, man sought liberation from his native status. The transplanted man was no longer obliged to be his father's shadow, routinized in a social role conferred upon him by his birth. Instead, as he had changed his place on the earth, so he sought to change his place in society.

The third phase was *psychic* mobility. The man who had changed his native soil and native status felt obliged, finally, to change his native self. If he was no longer his father's shadow, then he had to work out for himself a personality that fitted his actual life situation. Once he had changed his ancestral home and inherited status, thereby transforming his place and his role, he had to transform himself in ways suitable to his new situation. The acquisition and diffusion of psychic mobility may well be the greatest characterological transformation in modern history, indeed since the rise and spread of the great world religions. It is in any case the most fundamental human factor that must be comprehended by all who plan rapid economic growth by means of rapid social change. For psychic mobility—what we have elsewhere called empathy—is the mechanism by which individual men transform themselves in sufficient breadth and depth to make social change self-sustaining.³

This Western experience is what gave us that faith in spon-

³ Lerner, *The Passing of Traditional Society*, p. 43. Also K. Gompertz, "The Relation of Empathy to Effective Communication," *Journalism Quarterly* 37 (1960): 533-46.

taneity which Pye assures us died a little while ago. We assumed that, in any country that was given the right amount of investment or training or whatnot, empathy would rise and mobility would be accelerated—and the good society would be attained sooner or later. But the good society can only be attained later in the measure that advances are made to attain it at each stage, for in development terms the long run can only be a sequence of short runs. Hence stability is essential. The past decade has taught us that mobility, while indispensable to rapid social change, is not enough. It is a necessary but not sufficient condition of growth. Since mobility is a seeking for something better, it must be balanced by a finding—as, in equilibrium, a demand must be balanced by a supply. It is the continuing failure of many transitional societies to maintain the balance of psychic supply-and-demand that underlies the new revolution of rising frustrations.

The Want:Get Ratio

The spread of frustration in areas developing less rapidly than their people wish can be seen as the outcome of a deep imbalance between achievement and aspiration. In simple terms, this situation arises when many people in a society want far more than they can hope to get. This disparity in the want:get ratio has been studied intensively in the social science literature in terms of achievement and aspiration. The relationship we here propose for study can be expressed by the following equation (adapted from an ingenious formula of William James):⁴

$$\text{Satisfaction} = \frac{\text{Achievement}}{\text{Aspiration}}$$

This formula alerts us to the proposition that an individual's level of satisfaction is always, at any moment of his life, a ratio between what he wants and what he gets, i.e., between his aspirations and his achievements. A person with low achievement may be satisfied if his aspirations are equally low. A person

⁴ William James, *Psychology: Briefer Course* (New York: Holt, 1923), p. 187.

with high achievement may still be dissatisfied if his aspirations far exceed his accomplishments. Relative deprivation, as has been shown, is the effective measure of satisfaction among individuals and groups.

It is a serious imbalance in this ratio that characterizes areas beset by rising frustrations. Typically in these situations the denominator increases faster than the numerator—i.e., aspiration outruns achievement so far that many people, even if they are making some progress toward their goal, are dissatisfied because they get so much less than they want. Indeed, in some developing countries aspirations have risen so high as to annul significant achievements in the society as a whole.

How does such an imbalance in the want: get ratio occur? How can it be prevented or cured? What, in short, are the social institutions that affect the level of aspiration, the level of achievement, and the ratio between them? There are six institutions which function as the principal agencies of social change (or its inhibition): the economy, the police, the family, the community, the school, the media.

About the first five we can be very brief. If the economy can be made to supply all the opportunities needed to maintain reasonable equilibrium between achievements and aspirations—if the want: get ratio can be balanced by simply supplying all that people want—then there is no problem of frustration. Everyone is happy. Similarly, if the frustrations that arise are settled simply by police methods, then also there is no problem—at least, not for social research. Social research has little to contribute in situations of over-achievement or under-aspiration. Where riches outrun wants, where coercion inhibits desires, there social research is not needed. In most transitional societies that concern us, however, neither of these conditions obtains.

A more complex agency of social change is the family. Typically in developing areas the family acts as an instrument of conservatism and the retardation of change. It acts also, however, as an instrument of balance. To the degree that mobility involves the breaking of traditional family ties (and I believe the degree is high), this is a built-in destabilizer of the modern-

ization process. How to replace the stability of traditional family ties by other methods is a deep problem of social equilibrium under conditions of rapid change.

Similarly, the community may act as a powerful force to promote or impede balanced growth. Here the force hinges upon the individuals who function as activators and enthusiasts of modernization. Where these people emerge and prevail, communities tend to become positive agents of the purpose that modernization seeks to accomplish. Otherwise, in the absence of effective activators and enthusiasts, the coalition of adversaries and indifferents that forms within every transitional community will impede growth and disrupt equilibrium.

The schools, under conditions of modernization, are necessarily instruments of social change. They must teach what is new and modern, what is desirable and obtainable, because they have no other curriculum worth supporting. There are of course important variations in the effectiveness with which different schools produce modernizers and their products serve modernization. We shall not discuss schools further here, despite their importance, because their institutional role and behavioral function—in our model of modernization—can be handled as a variant of the mass media in the communication process.

The mass media, finally, are a major instrument of social change. They make indispensable inputs to the psycho-political life of a transitional society via the minds and hearts of its people. Theirs is the critical input to satisfaction in emerging nations and to citizenship in new states. To perceive the communication crux of modernization, we must consider deeply three propositions: (1) that the mass media bring new aspirations to people—and then, since the empathic individual imagination quickly (logarithmically, it appears)⁵ outruns societal achievement, it brings dissatisfaction conceived as frustration of aspiration; (2) that, despite the now-evident risks of frustration, the mass media continue to spread around the world—inexorably

⁵ This refinement of my basic theory I owe to my student Howard Rosenthal. See his "Contemporary French Politics and Sub-State Analysis" (Ph.D. dissertation, Massachusetts Institute of Technology, 1964), Appendix A.

and unilaterally; (3) that modernization—conceived as the maximization of satisfaction—can succeed (achieve more at less cost) if, and only if, a clarifying communication theory and practice are activated.

On the first proposition I have already written so much that I shall simply incorporate in this paper conclusions which any interested reader can pursue further in my (and other) published work.⁶ On the second point I have published descriptive studies of the inexorable and unilateral spread of mass media around the world, showing that no society, once it acquires a media system, does go back to an oral system of communication.⁷ In the next section of this chapter I want to explore *why* this is so. Then we shall turn to the third—and crucial—proposition about communication theory and practice.

How and Why the Mass Media Spread

If the mass media are to have some significant effect on modernization and democratic development—whether to facilitate or impede these desiderata—the first condition is that the mass media must spread. For, if the mass media do not spread, then we have no problem to discuss. We thus consider the question: what conditions determine whether the mass media spread?

One major condition is economic: the level of economic development in a country determines whether the mass media spread. All industrially developed countries produce mass media systems. No pre-industrial country produces mass media systems. Between these extremes lie the range of cases that interest us here, i.e., the developing nations. Here the general rule is that mass media spread in a direct and monotonic relationship with a rising level of industrial capacity. Where this rule applies, in general the spread of the mass media facilitates modernization. Where the rule does not apply, one may expect to find that the spreading mass media impede (or, perhaps more accurately, *deviate*) modernization. Why does this simple rule have such general force as is here claimed?

⁶ See footnote 2.

⁷ See Lerner, "Communication Systems and Social Systems."

The reasoning is clear if we consider information as a commodity. It is produced, distributed, and consumed like all other commodities. This brings information within the rule of the market. Notably, the supply-demand reciprocal comes into operation. This means that, to evaluate the functioning of a communication subsystem within a societal system, it is essential to consider—it may even be wise to begin with—the conditions that determine the efficient functioning of all economic processes: the capacity to produce and the capacity to consume.

We shall consider each of these briefly. Our discussion will draw its substance from the market economy model of the modern Western nations. It is in these countries, where the mass media developed in the private sector, that the mass media spread first historically, and where they remain today the most widespread in quantity of both production and consumption. Any account of this process that wishes to be relevant to happenings in the mass media around the world today must provide some reasonable explanation for the variant economic evolution of the mass media in the communist countries and the developing countries. The Soviet system provides some especially interesting deviations from the rule of supply and demand, e.g., the political rule of enforced supply and acquiescent demand for a social commodity taken out of the economic market place. Events in the developing countries, such as India and Egypt, do not yet form a "system," but they do alert us to the possibility of new ways of handling information that differ significantly from the historic evolution in the modern West. We shall therefore try to frame our discussion in categories that *must* apply to the operation of mass media whether a country be capitalist, communist, or neutralist.

CAPACITY TO PRODUCE

There must be a capacity to produce. No country—whether its ideology be Hamiltonian, Stalinist, or Gandhian—can produce information via mass media until it has an economic capacity to construct and maintain the physical plant of the mass media. I have made a simple checklist of the items needed to

produce mass media products. This checklist is neither precise nor comprehensive. It is simply a reminder of what it has taken historically and what it takes today to produce information via the mass media. A glance will indicate how much more complex this list would become if one were considering the most efficient means of producing information according to strict considerations of economic optima. But such considerations lie far outside the present purview of developing countries. For these countries the simple checklist will do.

Capacity to Produce: A Checklist

1. PLANT: Buildings
 Utilities (power, light, water)
 Facilities (studios, workshops, offices)
2. EQUIPMENT: Books (linotype)
 Newspapers (rotary)
 Magazines (rotogravure)
 Movies (film, camera)
 Radio (amplifier, transmitter)
 Television (picture tube)
 [Future standard equipment: satellites]
3. PERSONNEL: Copy producers (reporters, scripters, features)
 Copy presenters (actors, printers, layout)
 Managerial corps (editor, publisher, producer,
 director)

The items required to produce information via the mass media are grouped under the three categories of plant, equipment, personnel. The three categories, as well as the items listed within them, are arranged in ascending order of complexity. They may even be construed as a scale upon which rising levels of economic capacity could be calibrated. Thus, if one thinks of the contemporary United States, it may seem too rudimentary to list the plant. Yet efforts to spread the mass media in the developing countries have foundered, and con-

tinue to founder today, on just the three items listed in this category.

Even the item of buildings is a large hurdle and frequent stumbling-block. For one thing, buildings of adequate shape and size do not exist in most of the villages and towns and small cities of the developing countries. The mass media are perforce restricted to the capital cities for just this reason. But even such a capital city as Teheran, as we have seen, does not have enough buildings of the right shape and size to permit production or consumption of many full-length movies. The buildings in which the mass media operate must be provided with efficient utilities, such as power, light, water. How could a proper newspaper operate in Teheran without efficient telephonic communication, without regular telephone links to the great oil refineries at Abadan, to the summer and winter residences of the shah, to other capitals of the world—not to mention the electronic equipment needed for receiving the huge volume of daily news files coming from the international press services? Yet which of us does not remember some amusing or frustrating incident connected with his use of the telephone in a rapidly developing country? Which of us has not witnessed the inhibiting, and sometimes paralyzing, restrictions placed upon the mass media in these countries by the inadequacy of their facilities? Of the thirty-six film companies in Teheran, only one had studios. This was the only company that had managed to produce a full-length feature film.

The varieties of equipment required by the mass media are manifold, complicated, and expensive. I have listed the principal media in the historic order of their evolution, which corresponds also to the complexity of the equipment they required at the time their major development occurred. Thus the book publishing industry was able to develop on the basis of the simple linotype machine. A further technological advance made possible the spread of the mass circulation daily newspaper, namely the rotary press. Illustrated magazines were a medium of elite communication because of their cost until the development of rotogravure machines made possible the cheap production of millions of copies of illustrated monthlies and weeklies.

Similarly, the rapid development in our century of movies, radio, and television as industries hinged upon the capacity of American industry to produce at acceptable prices the mechanical and electronic equipment which are indispensable to the functioning of these mass media. The communication revolution of our time was technological before it became anything else. It is not implausible that in our century communication satellites will become standard equipment for the efficient functioning of mass media systems in many countries throughout the world.

The economic level of any country hinges also upon the quantity and quality of its skilled personnel. Particularly in the mass communication industries the capacity to produce hinges upon the availability of a corps of communicators, i.e., a substantial body of personnel trained in the array of special skills required for immediate production. Needed first of all are the skills that produce copy—whether it be for the news columns of a daily paper, a feature article in a weekly magazine, the script of a radio program, or the scenario of a movie or television show. Consider in passing the variety of features that fill the pages of every major daily newspaper. What a great variety of tastes, skills, and interests are needed to produce all this copy! Reflect for a moment that the man who has written a novel rarely turns out to be the man best equipped to adapt his own work for production as a movie. The man who does this may well be a person of much less creative talent but with superior specialized skill in scripting. Consider the further array of skills needed to present copy, after it has been produced, to the consuming public. Actors do this for the spoken word, printers for the written word. But consider the extremely specialized skill required for that essential presentation function performed by the so-called “layout man.” To make such large enterprises as a daily newspaper, a radio station, or a film company operate efficiently, a skilled managerial corps is also necessary. These are the editors and publishers, the producers and directors who are the kingpins of the mass communications industries. Without these many and varied persons the mass media have no capacity to produce.

If we simply reflect on the developing countries we know best in these terms, we promptly perceive that these conditions may well determine whether the mass media will spread. In reflecting further on the central question—whether the spread of the mass media will facilitate or impede modernization—we must take account of another condition: the capacity to consume.

CAPACITY TO CONSUME

Three factors determine whether the capacity to consume media products spreads—and how fast—in any country: cash, literacy, motivation. There is a simple side to this matter. A person needs cash to buy a radio, a cinema ticket, a newspaper. If a newspaper costs as much as a loaf of bread, and if his ready cash is in a chronic state of short supply, then there is a diminishing probability that a person will consume newspapers. On the same simple level: only a literate person *can* read a book, paper, or magazine, and only a motivated person *wants* to read. The media flourish therefore in the measure that their society equips the individuals with cash, literacy, and motivation to consume their products.

There is a more complex sociology, however, that underlies each of these factors and their reciprocal interaction. It is no accident that the mass media developed in the monetized sector of every economy. The barter of country newspapers against farmers' produce or artisans' products was a brief and transitory phase—occasionally magnified in the sentimental memoirs of superannuated country editors. The media grew in the monetized sector because this is the distinctively modern sector of every economy. The media, as index and agent of modernization, *had* to grow in the sector where every other modern pattern of production and consumption was growing or else remain stunted.

The efficient operation of a money economy was made possible only by a great transformation in the thoughtways and life-ways of millions of people. Historically, in any society the "sense of cash" is an acquired trait. It has to be learned, often

painfully, by a great many people before their society can negotiate the perilous passage from barter to exchange. Consider, for example, this sentence on the traditional Anatolian peasantry by H. A. R. Gibb: "We may suppose the *re'aya* to have been animated hardly at all by any idea of gain, and to have worked their land with a minimum of effort and very little knowledge."⁸

Gain, effort, knowledge—these are huge categories of discourse. For any adequate comprehension of the personality transformation which accompanied the shift from barter to cash in contemporary Turkey, we are obliged to take these large terms in their historical sense. What has been acquired in one generation among a population that had always been ignorant and indifferent is precisely the sense of gain, effort, and knowledge which came over centuries to guide personal behavior in the modern participant society of the West.

Cash is an essential solvent in modern life, and the achievement of rising per capita income distribution is a major objective of modern societies. Here the political and sociological problems of the developing countries become intertwined with their economic problems. Economies long caught in the vicious circle of poverty cannot easily break through into the modern industrial system of expanding production of goods and services. This fact reflects no inherent and inevitable distaste for the good things of life among developing peoples. It reflects rather the difficult communication process—which in the West occurred over several centuries—of stimulating desires and providing means for satisfying them where neither desires nor facilities have previously existed. Westerners engaged in economic development problems have only recently recognized that, once a start is made, the reciprocity between desires and facilities tends to operate in the new nations as elsewhere.

Consumption of media products is thus an economic function, but it performs simultaneously several other functions that are sociological, psychological, and political. Literacy is a technical requirement for media consumption. But literacy,

⁸ Hamilton A. R. Gibb and H. Bowen, *Islamic Society and the West* (London: Oxford University Press, 1950), vol. 1, pt. 1, p. 244.

once acquired, becomes a prime mover in the modernization of every aspect of life. Literacy is indeed the basic personal skill that underlies the whole modernizing sequence. With literacy people acquire more than the simple skill of reading. Becker concludes that the written word first equipped men with a "transpersonal memory";⁹ Innis writes that, historically, "man's activities and powers were roughly extended in proportion to the increased use of written records."¹⁰ The very act of achieving distance and control over a formal language gives people access to the world of vicarious experience and trains them to use the complicated mechanism of empathy which is needed to cope with this world. It supplies media consumers, who stimulate media production, thereby activating the reciprocal relationship whose consequences for modernization we have noted. This is why media participation, in every country we have studied, exhibits a centripetal tendency. Those who read newspapers also tend to be the heaviest consumers of movies, broadcasts, and all other media products. Throughout the Middle East illiterate respondents said of their literate compatriots: "They live in another world." Thus literacy becomes the sociological pivot in the activation of psychic mobility, the publicly shared skill which binds modern man's varied daily round into a consistent participant life-style.

Literacy is in this sense also a precondition for motivation. People who can read usually do read—as, indeed, they consume more of all the audio-visual products of the media (the well-known "centripetal effect") and participate more fully in all the modernizing activities of their society. What is required to motivate the isolated and illiterate peasants and tribesmen who compose the bulk of the world's population is to provide them with clues as to what the better things of life might be. Needed there is a massive growth of imaginativeness about alternatives to their present life-ways, and a simultaneous growth of institutional means for handling these alternative life-ways.

⁹ Carl L. Becker, *Progress and Power* (Stanford: Stanford University Press, 1936).

¹⁰ Harold Adams Innis, *Empire and Communications* (Oxford: Clarendon Press, 1950), p. 11.

There is no suggestion here that all people should learn to admire precisely the same things as people in the Western society. It is suggested, much more simply, that before any enduring transformation of the vicious circle of poverty can be started, people will have to learn about the life-ways evolved in other societies. What they subsequently accept, adapt, or reject is a matter which each man will in due course decide for himself. Whether he will have the capacity to reach a rational decision hinges, in turn, upon the fullness of his participation in the modernizing process as it works through every sector of his personal and social life. The final test comes in the arena of political participation.

MASS MEDIA AND POLITICAL DEMOCRACY

Democratic governance comes late historically and typically appears as a crowning institution of the participant society. In countries which have achieved stable growth at a high level of modernity, the literate individual tends to be the newspaper reader, the cash customer, and the voter.

The media teach people participation of this sort by depicting for them new and strange situations and by familiarizing them with a range of opinions among which they can choose. Some people learn better than others, the variation reflecting their differential skill in empathy. For empathy, in the several aspects it exhibits, is the basic communication skill required of modern men. Empathy endows a person with the capacity to imagine himself as proprietor of a bigger grocery store in a city, to wear nice clothes and live in a nice house, to be interested in "what is going on in the world" and to "get out of his hole." With the spread of curiosity and imagination among a previously quietistic population come the human skills needed for social growth and economic development.

The connection between mass media and political democracy is especially close. Both audiences and constituencies are composed of participant individuals. People participate in the public life of their country mainly by having opinions about many matters which in the isolation of traditional society did not

concern them. Participant persons have opinions on a variety of issues and situations which they may never have experienced directly—such as what the government should do about irrigation, how the Algerian revolt could be settled, whether money should be sent to Jordan or armies to Israel, and so on. By having and expressing opinions on such matters a person participates in the network of public communication as well as in political decision.

The mechanism which links public opinion so intimately with political democracy is reciprocal expectation. The governed develop the habit of having opinions, and expressing them, because they expect to be heeded by their governors. The governors, who had been shaped by this expectation and share it, in turn expect the expression of *vox populi* on current issues of public policy. In this idealized formulation of the relationship, then, the spread of mass media cannot impede but can only facilitate democratic development.

But ideal types do not always match perfectly with their empirical instances. In the developed democracy of the United States, for example, the capacity to produce information via mass media is virtually unlimited. The capacity to consume media products—thanks to an abundant supply and widespread distribution of cash, literacy, and motivation—is unparalleled anywhere in human history. The production-consumption reciprocal has operated efficiently on a very high level over many decades. Yet as American society presented the world with its most developed model of modernity, certain flaws in the operation of the system became apparent. I do not speak of the Great Crash of 1929—which exhibited a merely technical flaw in management of the economic subsystem. I speak of a much deeper flaw in the participant system as a whole, i.e., the emergence of nonvoting as a political phenomenon. A generation ago Harold Gosnell called our attention to this danger. In recent years an alarmed David Riesman has generalized this phenomenon to the larger menace of political apathy. If Americans were really suffering from widespread apathy about their public life, then a cornerstone of our media-opinion system would be crumbling—namely, in our terms, the

cornerstone of motivation. (We note in passing that, in the developed democracy of France only a short while ago, leading thinkers and scholars convened for solemn discussion of political apathy in France—of all places!)

If one danger to developed democracies comes from literate nonvoters, the parallel danger to developing democracies comes from the reverse configuration, i.e., *nonliterate voters!* Can universal suffrage operate efficiently in a country like India or Egypt which is 90 percent illiterate? Can the wise Jeffersonian concept of a literacy test for voters be completely ignored nowadays because we have radio? President Nasser has proffered a counterdoctrine for the developing countries, to wit: "It is true that most of our people are still illiterate. But politically that counts far less than it did twenty years ago. . . . Radio has changed everything. . . . Today people in the most remote villages hear of what is happening everywhere and form their opinions. Leaders cannot govern as they once did. We live in a new world."¹¹

But has radio really changed everything? When illiterate "people in the most remote villages hear of what is happening everywhere," what do they really hear? They hear, usually via the communal receiver at the village square in the presence of the local elite, the news and views selected for their ears by Egyptian State Broadcasting (ESB). Their receivers bring no alternative news from other radio stations. Being illiterate, they can receive no alternative news and views from newspapers and magazines and books published anywhere.

In terms of personal achievement almost nothing happens to these "people in the most remote villages" by way of Radio Cairo: broadcasting now supplies them with the kind of rote learning each acquired by memorizing the Koran (which he could not read) in childhood. But in terms of personal aspiration nearly everything happened to these people when radio came to their remote villages. For the first time in their experience—both the experience of centuries inherited through their parents and their own lives—these isolated villagers

¹¹ Gamal Abdul Nasser, *Egypt's Liberation* (Washington: Public Affairs Press, 1955).

were invited (and by none less than their rulers!) to participate in the public affairs of their nation.

The invitation carried with it, however, none of the enabling legislation needed to make radio-listening an integrative agent of modernization. In a modern society the radio listener is also the cash customer and the voter. In the remote villages of Egypt, when the government inserted radio into the community, nothing else changed in the daily round of life—except the structure of expectations. This is the typical situation that over the past decade has been producing the revolution of rising frustrations. The mass media have been used to stimulate people in some sense. It does so by raising their levels of aspiration—for the good things of the world, for a better life. No adequate provision is made, however, for raising the levels of achievement. Thus people are encouraged to want more than they can possibly get, aspirations rapidly outrun achievements, and frustrations spread. This is how the vicious circle of poverty operates in the psychological dimension.

The impact of this psychic disequilibrium—its force as a positive impediment to modernization—has been disclosed by Salah Salem, the youthful minister of national guidance who tried to run the Egyptian mass media during the contest for power between Naguib and Nasser. Salem, finding his problems of national guidance insoluble, finally solved them by voluntarily locking himself in jail. There he prepared a memoir of his own frustration in the impossible task of converting an inert and isolated peasantry into an informed and participant citizenry by the mass media alone. Salem concludes: "Personally I am convinced that the public was wrong."¹²

In similar vein, Nasser has written retrospectively: "Before July 23rd I had imagined that the whole nation was ready and prepared, waiting for nothing but a vanguard to lead the charge. . . . I thought this role would never take more than a few hours . . .—but how different is the reality from the dream! The masses that came were disunited, divided groups of stragglers. . . . There was a confirmed individual egotism. The

¹² This memoir is quoted in Lerner, *The Passing of Traditional Society*, pp. 244-45.

word 'I' was on every tongue. It was the solution to every difficulty, the cure for every ill."¹³

These judgments by leaders who were frustrated in their aspiration for quick and easy modernization reveal why transitional Egypt—in the dozen years since its liberation—has been so deeply frustrated. Can "the people," in Salem's sense, ever really be "wrong"? Can a social revolution ever really be accomplished in "a few hours"—or its failure attributed, in Nasser's sense, to "egotism"? Or is it, rather, that these young enthusiasts had never learned Lasswell's lesson—that political life is largely a question of "who gets what"? When people get involved in politics, it is natural that they should expect to get more of whatever it is they want. Instead of rebuffing such aspirations as egotism, the statesman of an enlarging polity and modernizing society will rather seek to expand opportunities for people to get what they want. He will seek above all to maintain a tolerable balance between levels of aspiration and achievement. In guiding the society out of the vicious circle toward a growth cycle, his conception of the role of public communication is likely to be crucial.

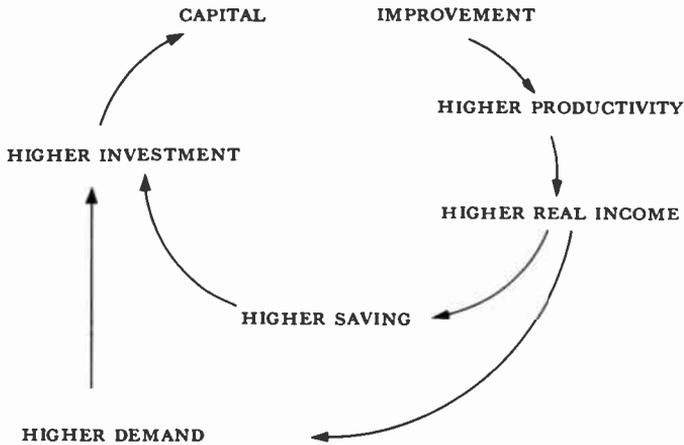
From Vicious Circle to Growth Cycle

"The vicious circle of poverty" is a phrase used to characterize the situation in which no sustained economic growth is possible because each specific advance is rapidly checked by some countertendency in the social system. The most important of such countertendencies is excessive population growth. Any significant economic progress tends to prolong life by reducing famine and pestilence. When death rates decrease more rapidly than birth rates—often, indeed, while birth rates are increasing—then rapid population growth occurs. In poor countries population growth tends to "lead" economic growth by setting rates of increase that must be attained so that the society can stay at its existing levels of poverty. No surpluses can be generated, hence no "leap forward" is possible. Singer has

¹³ Nasser, *Egypt's Liberation*, pp. 244-45.

succinctly summarized "the dominant vicious circle of low production—no surpluses for economic investment—no tools and equipment—low standards of production. An underdeveloped country is poor because it has no industry; and it has no industry because it is poor."¹⁴

The picture looks quite different in a society which has broken out of the vicious circle and set its course toward the achievement of a growth cycle. The new situation is vividly illustrated by the following diagram.¹⁵



The story told by this diagram reaches its climax with the achievement of a significant rise in real income. Such a rise becomes significant when it enables the society simultaneously to raise both demand and saving. We have seen that otherwise, in a poor society, small increases of income tend to be consumed promptly—with nothing left over for saving, hence investment. But when income rises rapidly enough to permit higher consumption and also higher saving, then the growth cycle is initiated. Higher investment leads to capital improvement and ris-

¹⁴ Hans W. Singer, "Economic Progress in Underdeveloped Countries," *Social Research* 16, no. 1 (1949): 5.

¹⁵ Gerald M. Meier and Robert E. Baldwin, *Economic Development: Theory, History, Policy* (New York: Wiley, 1957), pp. 319–20.

ing productivity, which in turn raise real income enough to encourage both higher saving and demand. Thereby higher investment is again stimulated—and the growth cycle becomes self-sustaining.

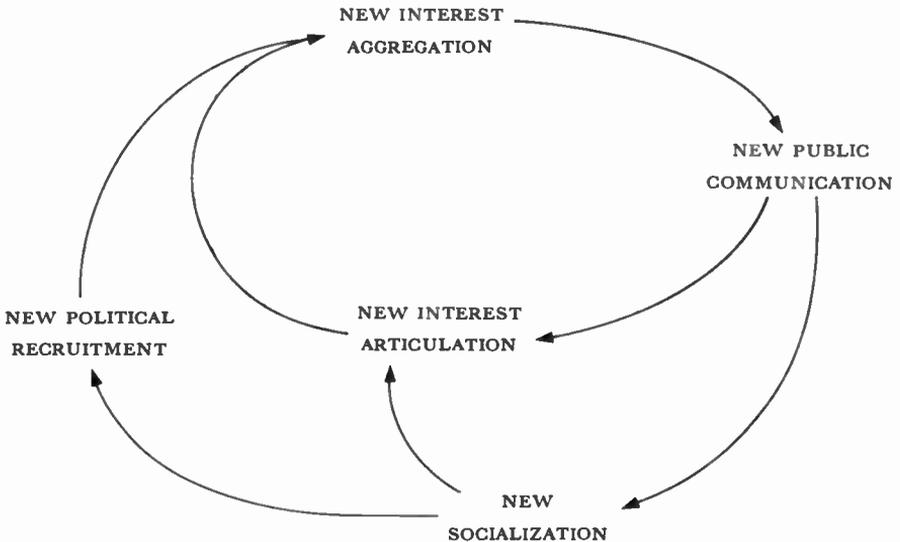
Specialists on economic development appear to be generally agreed on some version of this picture of the break-out from the vicious circle. There is less consensus, however, on the economic policies that will lead most efficiently from the break-out to the self-sustaining growth cycle. Contemporary economic thinking has tended to emphasize two quite different sets of theoretical analyses—which we may characterize as “disequilibria” and “balanced growth” theories—leading to different policies and programs.

It is difficult to resolve the issues between disequilibria and balanced growth on a theoretical level. The arguments rest in both cases on factors extraneous to the economy—i.e., on the values, beliefs, and institutions of a country and, especially, on its capacity to change these psychosocial factors as may be required for sustained economic growth. For example: higher income, even if rapid and substantial, will not necessarily lead to commensurate increases of saving and investment. There are numerous cases where higher income has led only to conspicuous consumption of imported products or to savings that were invested only abroad—hence with no effect on production and growth at home.

The growth cycle, which stipulates that higher income must be coupled with both higher consumption and investment, is likely to occur only in a society where effort is associated with reward—where saving is likely to compound interest, where investment at home is likely to conjoin personal with patriotic satisfactions (rather than exploit the latter and deny the former). The association of effort with reward comes from the matrix of social institutions, psychological beliefs, and political efficiency (in managing public adaptation to innovation) within which economic programs are obliged to operate.

The association of effort with reward, of aspiration with achievement, is a communication process. People must learn to make this association in their own daily lives—linking what

they see with what they hear, what they want with what they do, what they do with what they get. Communication is, in this sense, the main instrument of socialization, as socialization is, in turn, the main agency of social change. To parallel the economist's model of the growth cycle, we may represent the conditions for an expanding polity and modernizing society as follows (adapting the input functions proposed by Gabriel Almond).¹⁶



The modernization process begins with new public communication—the diffusion of new ideas and new information which stimulate people to want to behave in new ways. It stimulates the peasant to want to be a freeholding farmer, the farmer's son to want to learn reading so that he can work in the town, the farmer's wife to want to stop bearing children, the farmer's daughter to want to wear a dress and do her hair. In this way new public communication leads directly to new articulation of private interests.

Simultaneously—by analogy with the significant increase of

¹⁶ Almond and Coleman, *The Politics of Developing Areas*, p. 17.

real income that enables both saving and demand to rise simultaneously—new public communication activates new modes of socialization. If new interest-articulation parallels demand, then new socialization parallels saving—the factor that will make possible new investment and, ultimately, the supply of new satisfactions for the new demands. So, while new communication is promoting new articulation of interests among the existing generation, it is also preparing a new generation who will incorporate these interests and go beyond them. The farmer's daughter who wants to show her face is likely to raise a daughter who wants to speak her mind. The farmer's son who wants literacy and a town job is likely to raise a son who wants a diploma and a white collar. Socialization thus produces, ideally, the new man with new ideas in sufficient quality and quantity to stabilize innovation over time.

In order to incorporate innovation efficiently, a society must translate it from private interests into public institutions. An essential step forward must be made from the articulation to the aggregation of private interests—which, when aggregated and accepted in the polity, become the public institutions of a society. It is also necessary that a new process of political recruitment come into operation. Among the newly socialized generation some must be recruited into political life so that the new aggregation of interests into institutions may be accomplished and sustained. So it is that, starting from a breakthrough in communication, reinforced by new ways of socialization (ideas of what one's children may be and practices designed to achieve these aspirations), a new political class is recruited that aggregates the new interests articulated within the society in such fashion as to create its new institutions—its version of modernity.

Looking Ahead

Our set of considerations has been presented tersely. We have merely raised and related considerations that need to be explored in depth. This is a task for social scientists in the decade ahead—a task that will be the better performed in the

measure that we improve our understanding of the communication crux of the modernizing process.

Our understanding begins with recognition that the revolution of rising expectations has been a major casualty of the past decade. In its place has risen a potential revolution of rising frustrations. This represents a deep danger to the growth of democratic polity in the world. People who do not aspire do not achieve; people who do not achieve do not prosper. Frustration produces aggression or regression.

Aggression in today's transitional societies expresses itself through violence based on moralistic but often inhumane ideologies. Such doctrines, albeit in prettier euphemisms, authorize fear, greed, and hate to operate as racism, xenophobia, vengeance. Regression in these societies signals the return to apathy and the narcosis of resignation. Aggression among transitional peoples victimizes others; regression victimizes themselves. Neither process is compatible with the dynamic equilibrium that promotes modernization. Hence the global spread of frustration must be checked and a tolerable ratio of aspirations to achievements must be instigated.

Communication is the crux. In the introduction of this volume it was observed that "the state of politics is a function of the communication process." The communication catastrophe in transitional societies has been their failure to discourage—often, indeed, their effort to encourage—the "insatiable expectations of politics" that lead ultimately only to frustration. Short-sighted politicians have been sowing a storm they may not be able to harvest. The policy of whipping up enthusiasm on short-run issues by creating insatiable expectations has never produced long-run payoffs.

What is needed in the years ahead is a new conception of public communication as the crucial instrument which can promote psychic mobility, political stability under conditions of societal equilibrium. The mass media can be used to mobilize the energies of living persons (without creating insatiable expectations) by the rational articulation of new interests. Flanked by the schools and community leaders, the mass media can simultaneously induce a new process of socialization among

the rising generation that will, among other effects, recruit new participants into political life. These two processes—short-run mobilization and long-run socialization—can then converge, a generation later, in new aggregations of private interests which are the stuff of a democratic polity.

What we have sketched here is of course an idealized model. In the measure that it corresponds to reality, the model provides clarification and guidance for those who must think and act in the transitional lands. The task for future research is to determine under what conditions the model does or does not work, so that a better model may be developed to shape a more effective communication process where it is most needed. This calls for close and continuous cooperation between men of knowledge and men of action on the most challenging social problem of our time—the modernizing of most of the world.

**E. THE TECHNOLOGICAL FUTURE
OF MASS COMMUNICATION**

INTRODUCTION

Implications of the New Communication Technology

WE ARE ENTERING upon an Age of Information, during which changes in communication technology are likely to have a great deal to do with what information is communicated to whom, how, and in what form.

The dimensions of the ongoing technological change can be suggested by a few figures.

Communication satellites are only thirteen years old, but already their power has been increased by two orders of magnitude, and the ability to broadcast directly from satellite to village or home is almost at hand. Between 1970 and 1975 the internal communication channels of the United States are expected to grow by a factor of six. For a long time we have found electric typewriters and electric calculators very useful in processing information. A good typist at an electric typewriter can turn out between 60 and 100 words a minute; but a computer printout machine can turn out well over 1,000 fifteen-inch lines a minute. An electric calculator runs at about ten cycles per second, but a computer operates at speeds that can be expressed only in *nanoseconds*—billionths of a second. Lino-type operators now set as many as 175 characters a minute, whereas experimental electronic typesetting machines are flirting with the possibility of 1,000 characters a *second*. From cables with hundreds of channels, we have now moved to satellites with thousands, and perhaps soon shall be using laser beams with hundreds of thousands! And on a four by six inch card it is now possible to put as many as 3,000 printed pages, for quick reference or storage. On such cards, a college library could be carried in a brief case!

As technology has advanced, so has the supply of informa-

tion. In part this is because our horizons have receded, and we now need information from a vastly larger area, from many more sources, and of many more kinds than before. For example, who would have anticipated, only a few decades ago, that we should have to send and receive telemeter data, voice, and television from the moon? Beyond this, however, more information is becoming available. More people are producing information. The amount of science in print, to take one example, is doubling about every twelve years. There is twice as much in 1970 as in 1958, and in 1982 there will be probably four times as much as in 1958. It is rather startling to think that about 90 percent of all the scientists of whom we have any record are still alive.

Therefore we have a battle on our hands between the need for more information and the increasing difficulty of using it, between our vastly increased ability to deliver information and the finite capacity of the human brain to scan and absorb it. The shape of tomorrow's communication system will be determined largely by the compromise arrived at between these conflicting elements.

Readers of this volume may very well see a large-scale development of wired cities, wired schools, and wired industries, using coaxial cables or other channels that are able to carry as many as forty television channels or the equivalent, bringing instructional materials where and when a teacher or a student working by himself needs them; bringing business and financial data (money may go out of existence) to business, and automation data to and from factories; bringing entertainment, news, home study materials, shopping opportunities, conventions, meetings, and countless other services into homes. Some observers have speculated that we may have a new electronic medium—not quite like television or newspaper or magazine or library or any other existing pattern, but something that will let a subscriber order the entertainment, news, or other information he wants and see it on a viewing screen with or without sound, or have it printed out in his living room. The key instrument in any developments like these will be the computer, because of its ability to store vast quantities of informa-

tion, tap data banks and automated libraries, process information at great speeds, and carry out the orders of users for the special service they desire.

This is not science fiction, although one of the men who writes best about the future of communication technology has become well known for his science fiction. This is Arthur Clarke. He is author of *2001: A Space Odyssey*, but, more to our point, he was the author of a serious scientific article, in a British journal in 1945, that touched off the effort to build communication satellites. Twelve years later, the first Soviet Sputnik was flying, and twenty-four years after Clarke's article, men were communicating to and from the moon.

The other article in the following section was produced by a social scientist, Herbert Goldhamer, for the RAND Corporation and the Russell Sage Foundation. It surveys some of the new communication technology available, and speculates on the social implications.

HERBERT GOLDHAMER

*The Social Effects of Communication
Technology*

This well-informed and insightful report was put together by a team at the RAND Corporation at Santa Monica, under the direction of Herbert Goldhamer, for the Russell Sage Foundation. It sets out to review in a nontechnical fashion the principal technological developments behind the "communication revolution." These include basic discoveries and developments like the transistor and the computer, and devices like cable technology, microwave, communication satellites, and microfiche. After reviewing this technology, the report sketches in some of the probable social consequences of the new technology, and some of the policy questions that must be answered before the full usefulness of the new developments can be realized. The authors of the report are careful to avoid extravagant claims and fantasy about social change, and yet a reading of their quiet section on "Living," to take one example, will leave no one in doubt as to the enormous potential impact of the technology that is now available or coming into being. The report was issued by RAND in May, 1970, and is reprinted here by permission of the Russell Sage Foundation, RAND, and Dr. Goldhamer.

Preface

THIS PAPER has two objectives: (1) to introduce readers to recent technological developments in the communication field and to alert them to their possible significance for social change and policy issues; and thereby (2) to encourage and facilitate research on the social effects of communication technology. This paper is not a comprehensive review of either the relevant technical developments or their likely social effects. It attempts to provide just enough *illustration* to suggest the importance of the subject and to pique curiosity. Statements concerning future social effects are to be understood as guesses and as raising possible questions for public policy. Only in a few instances are such statements based on systematic research.

For so modest an effort and so brief a document there are an unusually large number of debts to record. The paper is, in

fact, very much the joint product of several RAND staff members and RAND consultants. Ben H. Bagdikian, Nathaniel E. Feldman, Sue A. Haggart, Leland L. Johnson, and Richard Maullin of RAND, and RAND consultants Leonard Chazen, James S. Coleman, and Martin Shubik prepared papers on topics of special interest to them, much of which has been incorporated directly into this paper. N. E. Feldman and J. L. Hult of RAND have been especially helpful on technical matters. They reviewed two drafts and have certainly reduced the number of errors. Rudy Bretz, Yehezkel Dror, John Farquhar, John Hogan, Fred Iklé, Dr. T. L. Lincoln, Keith W. Uncapher, and Sorrel Wildhorn of RAND were available for consultation. Suzanne Mennine provided helpful bibliographical services, and Christine D'Arc and Joan Goldhamer editorial assistance. In addition, many RAND papers have been consulted whose authors are silent partners in this enterprise. Finally, a debt of gratitude must be recorded to Ronald Westrum, RAND consultant, who condensed and brought the RAND and other materials together into a first draft. I have reworked his version, included some additional topics and materials, and have added some thoughts of my own. Having had the advantage of the last word, I must accept responsibility for errors.

We are all very grateful to the Russell Sage Foundation for its support for the preparation of this paper.

Herbert Goldhamer
The RAND Corporation

Introduction

The revolution in communications, which owes much to the rise of semiconductor technology, is just beginning. This paper outlines some recent and impending changes and indicates briefly some of their possible social effects. In almost every case there is considerable room for facilitation or restraint of these social effects by private and public groups. Where and how communication satellites, cable transmission systems, computers, videophones, ultramicrofiche, and various other devices

will eventually fit into more comprehensive communication systems will not simply be a function of technical capabilities and cost considerations but also of public policy and of entrepreneurial and consumer pressures and choices. Once made, some of these choices may be difficult to reverse because of investments undertaken and the consequent vested interests created.¹

Choices will also depend on technical developments in fields other than communications; for instance, transport. A message may be transmitted by a variety of communication devices or by travel and personal presence. Communications is not the only field undergoing rapid development; the total shape of the future will be determined by responses to other technologies.

Difficult as it is to forecast developments in technology, the latter's effects on society are even more hypothetical. Much of the material in this paper is necessarily speculative. But speculation is unavoidable if intelligent discussion, research, and planning are to take place. There is too little realistic appreciation of the potential benefits of communication development and also there is too little appreciation of its difficulties and dangers.² The enormous amount of capital necessary to realize some of these systems, the wide range of interests that are likely to become involved, and the difficulty of changing decisions once implemented indicate the need for a wide perspective.

This paper concentrates on devices that already exist. The communication systems of the 1980's will be based largely on

¹ The transoceanic Atlantic cable using vacuum-tube amplifiers that was installed in 1956 was assumed to have a service life of twenty years for calculating depreciation. The useful technical life of that cable is now expected to be about forty years. The new transoceanic submarine cables using transistor amplifiers are also to be depreciated over twenty years. Since the amplifiers are being designed to eliminate primary failure mechanisms, the new cables may in fact have a useful technical—but not necessarily economic—life of 100 years. This, of course, does not preclude such systems seeming obsolete within the next twenty years compared with the performance of satellite systems.

² To confine attention for the moment to purely technical and economic difficulties: if 1 percent of the households in the country were to have Picturephone R (a trade name), twice the current channel capacity would be required, since Picturephone requires one hundred times the channel capacity of the ordinary telephone.

devices already in use, available in the laboratory, or being tested. But it will take many years for these devices to be widely used. The 90 million television sets and their antennas in the United States represent a consumer investment of about \$21 billion. The accumulation of consumer investments of this order for new devices cannot occur overnight.

Our approach is conservative: we have avoided guessing how devices yet to be invented will affect social life. Thus, for instance, there is no mention of communication by laser, which might have important effects. The reason for this conservatism is simple: the systems described here are already being installed, and their social impact is already being felt. The comfortable sense of the remoteness of the future is inappropriate when considering data banks, CATV, ultramicrofiche, computer-implemented communication systems, "wired cities," and the like. Decisions regarding their utilization are being made now, not tomorrow.

The Technological Foundations of the Communication Revolution

The current revolution in communications is based on a large number of inventions and technological advances. Some, like the electronic computer and the transistor, are new inventions. Others, like the printed circuit, are modifications with revolutionary effects because of savings in cost, size, and weight, or improved reliability. The net effect of both new inventions and constant modifications of old ones has been a continuous flood of new and newly improved devices with each stage generally cheaper and more effective than the previous one. Even experts in the electronic field have trouble keeping up with the state of the art. For laymen and social scientists the task of understanding and keeping abreast of electronics technology is nearly insuperable. A brief discussion of some basic advances is provided here as background for understanding subsequent sections.

THE TRANSISTOR

Basic to the revolution in communication technology is solid state technology, essentially the transistor using semi-conductor materials, materials which in their ability to conduct electricity are intermediate between good conductors and insulators. Before the discovery of new types of semi-conductors and the invention of the transistor amplifier, electronic amplification employed vacuum tubes, which were large, costly, and demanding of primary power. The first transistor was made in 1947, the result of a program at Bell Telephone Laboratories to study the properties of semi-conductors. Commonly used semi-conductors are germanium, silicon, and gallium arsenide. The electrical properties of semi-conductors are highly sensitive to impurities. By putting controlled amounts of impurities, on the order of a few parts per million, in very pure blocks of a semi-conductor material, it is possible to create devices that can duplicate the functions of the vacuum tube.

Semi-conductors had been used as radio-frequency detectors and telephone rectifiers, but it was not until 1947 that the transistor amplifier was successfully developed. The transistor permitted radios, computers, and other pieces of electronic equipment to be made smaller, cheaper, and more portable. Transistors also have a smaller power consumption, are more reliable, and require no time to warm up. Solid state components gradually replaced vacuum tubes in all but a few applications. The hand-held transistor radio and hearing-aid-equipped eyeglasses, as well as the great variety of electronic "mini-snoopers," are some of the devices made possible by the transistor.

PRINTED CIRCUITS

Printed circuits were first developed on a large scale after World War II. The desired connections are informed on an insulating material by either superimposing a uniform copper film and then etching it away, where no conductors are desired, or occasionally by the electroplating or vacuum deposition of a

copper film, where conductors are desired. Such printed circuits are generally machine-soldered and tend to be more reliable than hand-soldered connections. Even more important, as techniques improved, the printed circuits became smaller.

THE INTEGRATED CIRCUIT

If the connections between components could be miniaturized, why not the components themselves? In the early 1960's vacuum technology and careful control of the amount and location of impurities enabled circuits to be deposited on silicon wafers that included not only the connections but the components as well. On a single silicon wafer the size of a quarter it is now possible to have 400 to 1,000 complete circuits operating at the same time. Integrated circuits required an entirely new technology. The amount of impurities used with semi-conductors had to be meticulously controlled, and a whole new range of techniques had to be developed—deposition equipment, special ovens, and the ability to lay down materials in strips 0.010 in. thick and as narrow as 0.0001 in.

Integrated circuitry (IC) was expensive at first. The original integrated circuit devices cost \$250 to \$600 for a single circuit; the same circuit could be produced from conventional parts for \$10. But the integrated circuits were needed for specialized military applications that required light weight, small size, and minimal power consumption. Now, IC devices are mass-produced in 50,000-piece lots and sell for \$2.50. IC techniques have become increasingly refined. Large Scale Integration (LSI) now permits placing the equivalent of hundreds of transistors on a single pinhead of silicon.

THE COMPUTER

Although the first electronic computer, ENIAC, was built at the University of Pennsylvania only in 1946, computer development has been so rapid, especially in the last few years, that a modern computer now seems to ENIAC what ENIAC is to an abacus. Comparing computers of 1953 and 1965, W. H.

Ware notes that "the 1953 machine weighed about 5000 lb, had a volume of 300 to 400 cu ft, and required about 40 kilowatts of power. The contemporary computer [1965] is a hundred-fold lighter (about 50 lb), a thousand times smaller (about one-third cu ft), and required 250 times less power (150 watts). Moreover, it has twice the storage and runs ten times as fast."³

The saving in size, weight, and power is due to solid state technology and integrated circuits, as is the increase in memory storage and speed of computation. Yet progress continues so rapidly that statements about the state of the art generally have to be made in the past tense. Solid state technology and integrated circuitry appear to make the cigarette-package or vest-pocket-sized general-purpose computer (central process) plausible in the not-too-distant future.

These technical gains have also meant economic gains. A National Academy of Science study estimates the cost of making 125 million multiplications to have progressively diminished from \$12.5 million for a man working unaided, to \$2.15 million for a man with a desk calculator, to \$130,000 for ENIAC, \$132 for IBM 7094, and \$4 for CDC 6600.

Initially the principal input into computers was numbers, and the computer was required to manipulate these arithmetically to provide other numbers as outputs. Today, in contrast, computers process many nonnumerical inputs, such as in industrial production control systems. Spoken and written language and pictorial inputs facilitate the use of computers for language translation, business records, information retrieval, picture processing, medical diagnosis, chess playing, and numerous scientific tasks. Progress in processing pictorial inputs and providing pictorial outputs has been especially rapid. The development of numerous input and output devices (consoles) that make the machine and its output more accessible to the user provides for digital, alphabetic, and pictorial outputs in printed (hard copy), visual, and even oral form. Computers have not been able to produce hard-copy print-outs at the rate at which they process the inputs. But units are now available

³ Willis H. Ware, *Future Computer Technology and Its Impact* (The RAND Corporation, P-3279, March, 1966), p. 12.

that print over 1,000 lines per minute on paper and 3,000 lines per minute on instantly developed and viewable microfilm.

Progress has also been made in developing languages that facilitate "conversation" with the computer. Programming the computer to perform the desired tasks ("software") has advanced in several directions but primarily through the development of languages more readily learned by the user, who then allows the computer to translate this "compiler" language into the language the computer requires for actual processing; and through the stockpiling of ready-made programs for operations that recur with sufficient frequency to make this stockpiling economical.

Complex programs are still difficult to write, however, and are enough of a bottleneck to have postponed some uses of computers in business because the required software was not available. Nevertheless, computers can be used effectively by persons with limited training and experience: for many uses an afternoon's instruction suffices. "Natural languages" are being developed that may permit use of the computer in more-or-less everyday language. And the computer's ability to respond to oral inputs and commands is not excluded in the future.

The development of input-output terminals, together with the enormously increased speed of computers, has permitted the use of communication lines to tie in a whole series of terminals to a single computer or set of computers, which can thus be shared by many users having individual terminals or consoles. This arrangement is usually referred to as an "on-line, time-shared computing system." The central computer operates fast enough so that individual users are not aware of any competition for the computer's time or of any appreciable lapse of time before the output reaches their terminal. The geographical area of such a shared computer system is as great as the available communication network (ordinarily the telephone system), although current transmission costs generally confine such systems to a radius of about 200 miles.⁴ Naturally, the

⁴Of course, some data uses are sufficiently important to bear costs of transmission over much greater distances. And the different time zones create differ-

sharing of a single large computer reduces considerably the cost of computer use and permits access to data banks and other computer services that would otherwise be quite out of reach for many users.

The computer is important in communication studies because its information processing abilities make it the major building block in the great array of developing communication systems. Indeed, as we shall note below, the distinction between computer systems and communication systems increasingly tends to be blurred.

Devices

The technological advances reviewed above have, together with others, permitted enormous advances to be made in a whole set of devices important for communications.⁵ These devices, some of which are described below, are of two main types: transmission devices such as cables, microwave systems, and communication satellites; and input-output devices that process signals at the two ends of the communication line. Among the latter are videophone, long-range facsimile machines, and ultramicrofiche.

ent times of peak load. Thus the transmission of some kinds of data across the Atlantic may be warranted.

⁵ The transmission of signals electronically requires the use of a certain portion of the electromagnetic spectrum. The amount of spectrum required to transmit a given signal is called the bandwidth, which is measured in such units as kilocycles per second or megacycles per second. A megacycle is equal to 1,000 kilocycles. Kilocycles per second and megacycles per second are shortened respectively to kilohertz (kHz) and megahertz (MHz). For instance, a telephone channel requires a bandwidth of about 3 kHz for each direction, or 6 kHz for a two-way circuit; a television channel occupies a band 6 MHz wide. Thus a cable that carries 5,000 voice circuits can carry only five television channels. To transmit music at high fidelity requires 10 to 20 kHz or about four to six times the bandwidth used in one-way voice communication. Bandwidth for analogue signals is related to the information rate for digital signals. Information rate is measured in binary digits, or bits, transmitted per second. The greater the bandwidth of the analogue signal or the higher the information rate for digital signals, the greater the cost for transmission.

CABLE TECHNOLOGY

As in most other areas of communication, developments in cable technology have increased the capacity and decreased the cost per channel. The first submarine telephone cable laid between the United States and Europe in 1956 had only thirty-six telephone circuits and cost \$45 million to build and install. The newest transistorized cable being built between the United States and Spain will have 720 circuits at a cost of only \$70-80 million.⁶ Thus this cable will have a cost per circuit of only about 10 percent that of the 1956 vintage.

The cost per circuit of high-capacity terrestrial coaxial cable has also declined sharply. The "L-1" coaxial cable now in use has 2,000 voice circuits and an investment cost of \$3 per year per circuit-mile. In contrast, the "L-5" cable, soon to be introduced, has 81,000 voice circuits with a cost of 35 cents per year per circuit-mile.

MICROWAVE TECHNOLOGY

Terrestrial microwave systems operate in the same general range of radio frequencies as do communication satellites. They use line-of-sight radio relay towers spaced twenty to fifty miles apart (depending on the terrain) to transmit communication signals. In the early postwar years they were available only to communication carriers and public utilities, but the Federal Communication Commission (FCC) now assigns frequencies within the 6 GHz and 12 GHz bands (where the gigahertz [GHz] is 1000 MHz) for privately owned industrial microwave systems. These private systems can be used for computer data transmission, voice and message transmission, and closed-circuit television. Progress in the microwave field has been so rapid that many private companies now find it economically attractive to own and operate their own communication (microwave) system to connect widely scattered plants and offices.

⁶ The transistor amplifiers of the cable repeat or amplify the signal along the cable and thus offset the attenuation due to cable losses.

CABLE TELEVISION (CATV)

Cable television distributes TV programs through coaxial cables, in contrast to TV broadcasting, which radiates them over the air. In 1950 in an Appalachian village, a local radio dealer rigged up a tall antenna on a nearby mountain to collect television signals because the mountains spoiled the reception of signals received by lower antennas. Then wires were run from the antenna into the homes of those willing to pay a small fee. Thus began what was called "community antenna television," from which the acronym CATV sprang.

Today, CATV generally refers to distribution systems involving many building complexes and rights of way on public as well as private properties. Contemporary cables carry twelve to twenty channels, which permit more than merely relaying television signals received from local TV stations. While many cable networks use the extra channels for time signals, news headlines, or weather reports, the extra bandwidth could equally well be used to transmit programs of interest to particular neighborhoods or other limited areas. A cable system is an amazingly versatile instrument, able to relay voice signals, data signals, credit transactions, sensor signals, and in fact almost anything that one might want to send. It is precisely this versatility that makes it such an important development. Perhaps in the future cable will be used for all local fixed-point communication and radio will be reserved for communicating with vehicles in motion. This idea had led to the "wired cities" concept.

A wired city is an entire urban area connected by cables that might be controlled by a common carrier. Since these cables could carry nearly all signals except those to moving vehicles, the channels would be leased for telephone, data transmission, television, etc. The financing of television programs might be done by individual subscription (pay TV), through advertising, or by community groups who want to use the cable network for their own programs. Transmission and programming of some educational programs would presumably be financed by tax monies.

Community cable networks could be interconnected by satellite or terrestrial microwave, producing a national network of wired cities able to receive each other's television programs, voice and data transmissions, and videophone communications. It is a small jump, but with large implications, to an interconnected world.

Cable television could well become the most important communication development in the United States in the 1970's. There are several reasons for this, other than the enormous number of channels available to CATV and its ability to serve a whole host of communication purposes. Part of the excitement over CATV stems from the problems presented by conventional terrestrial broadcast television. Although terrestrial broadcast TV is at present the cheapest way of reaching very large audiences, it has the following disadvantages. (1) Signals are often of poor quality in densely populated areas, owing to interference from other stations. Color television requires a higher-quality signal than black and white television, because multiple images, or "ghosts," are more disturbing with color. In theory, some of these signal quality problems of terrestrial broadcasting can be solved through the installation of better rooftop antennas and the redesign of all TV broadcast transmitters and home receiving sets to incorporate a change in modulation, but no really satisfactory solution is apparent at this time. (2) The variety of programs available on terrestrial broadcast television is limited. The number of commercial channels receivable by an average household in 1967 was 5.6 as compared with the potential of 20 channels on single-cable CATV. It is extremely unlikely that either conventional broadcast or direct television broadcasts from satellites will be able to match this capability in the foreseeable future. (3) There is an urgent and growing need to reserve more of the broadcast spectrum for services other than television, especially mobile radio. Available bandwidth resources are already being strained to provide communication services for police, fire, hospital, and military vehicles.

An important feature of a cable broadcasting system is its ability to provide feedback (response from viewers) via voice

bandwidth lines. A single television channel on the cable, for example, can be time-shared among a thousand households. Provision of a fully two-way system requires only a minor perturbation of the one-way system, since the bandwidth for reply is small. Thus the added complexity is small and the added cost is minimal, if the reply bandwidth is furnished in the original installation.

This feedback capability could be used for many purposes. The total number of bits needed for identification and response need be only about ten to thirteen per household. A lecturer could determine if his listeners were following him by periodically asking a question and having viewers press the answer button. A computer could read each viewer's reply and display the results in front of the lecturer. Such feedback also makes feasible a TV shopping service and polling or voting from the home.

Current cables permit twenty channels of high-quality color television per cable. Typical installation charges run from \$10 to \$50, with monthly charges thereafter of about \$5. According to National Community Television Association, Inc., toward the end of 1968, about 2,300 Cable Television (CATV) systems were in operation with 3,500,000 subscribers, representing about 6 percent of the 60,000,000 households in the United States.

VIDEOPHONE

Although switched ⁷ audiovisual systems have been in use for some thirty years (one was operated by the German post office between centers in four cities in 1935-38), general switched systems have been commercially available only in the last few years. To date, the videophone systems in operation are only experimental. The most recent offering from Bell Telephone Laboratories is Picturephone^R, a monochrome, thirty-frames-per-second system with a 5 by 5½ inch screen. Because its scanning is slower than that of conventional television, the picture

⁷ A switched system is one that is capable of routing traffic among a multitude of possible destinations.

is of lower quality. It has a "zoom" lens that can focus at distances of three to twenty feet; the latter allows showing black-board drawings and groups of people.

While Picturephone has obvious advantages over the ordinary telephone, it will be expensive—\$50 to \$100 just for the fixed monthly minimum charge in addition to usage charges. Although this may not deter commercial use, the consumer market is likely to be small. Many in AT&T believe the service will expand rapidly—to perhaps a million Picturephone sets in service by 1980. For comparison, note that this is about 1 percent of the 109 million telephone sets now in service. Even this small a penetration of the market would require an investment of \$6 to \$10 billion, and thus would be significant compared with AT&T's \$40 billion investment in current physical plant. If penetration over the next twenty to thirty years were to reach 10 percent that of the telephone, the investment would be roughly equal to the total telephone plant investment in that period. At present, Picturephone uses a 1 MHz bandwidth analogue signal between the subscriber and the central office, i.e., the local loop. For long-distance transmission with negligible degradation of signal quality, this signal is converted to digital form and transmitted over a long-haul digital trunk.

Finally, someone with a Picturephone can only call someone else with a Picturephone. Although Picturephone has genuine utility for communication, it may, like corporate jets and computers, become a status symbol and initially be adopted even where uneconomical.⁸

LONG-RANGE FACSIMILE

The ability to send printed or written materials from one place to another in a few minutes is important in some governmental, business, professional, and scientific situations. To do

⁸ The Bell telephone system now provides Picturephone service between New York, Washington and Chicago. Users, however, must go to special Bell terminals in each city. Two days' advance notice is required. The New York-Washington rate is currently \$8.00 for the first three minutes and \$2.50 per minute thereafter.

this, one can use either teletype, in which the document is re-typed as it is being sent, or facsimile, which transmits a photocopy. While teletype is much cheaper, it cannot be used for drawings or materials whose original format must be preserved. The future of long-range facsimile service depends primarily on lowering costs. Facsimile is now transmitted over the regular telephone line, a system ill adapted to the needs of facsimile. In the future, a digital, broadband system with electronic switching (see below), will make facsimile transmission much more efficient.

When facsimile distribution of newspapers will become feasible is difficult to predict, but in Japan the newspaper *Asahi Shimbun* has been licensed to transmit a facsimile newspaper into homes for an experimental period. The facsimile receiving set to be used by *Asahi* subscribers is reported to be able to reproduce in six minutes a newspaper page 12½ by 18 in. on both sides of a sheet of electrostatic recording paper. *Asahi Shimbun* has stated that the facsimile receiving sets could be mass-produced for \$300.

In conjunction with satellite or cable transmission, a facsimile mail system could transmit high-priority mail instantaneously from one point on the earth's surface to another, a service that could be attractive even in an era of supersonic air transport. A worldwide system would, of course, require cooperation among the post office organizations of the countries involved.

DIGITALIZATION AND SWITCHING

Engineers increasingly believe that telephone facilities should be changed from an analogue to a digital form of transmission. This means that the sound of the voice, now transmitted through continuous electrical pulses generated by the mechanical effects of sound (analogue signals), would be transmitted instead by discrete binary signals, that is, signals composed of "bits," which represent a choice between two alternatives, such as 1 or 0, "yes" or "no," etc. (From these digital bits much more complicated signals can be constructed.) The

rationale for advocating this change is fivefold: (1) digital signals are required in order to take maximum advantage of Large Scale Integration technology; (2) many of the kinds of signals that one would want to transmit would be digital anyway, since many devices that can be hooked to telephone systems (e.g., computers) now work on a digital principle; (3) an analogue signal can be converted to a digital signal and transmitted with as little error as one desires; (4) a digital signal can much more easily be scrambled to ensure privacy; and (5) data transmission traffic is such that telephone systems may soon be swamped. A digitalized telephone system has an advantage in being able to compress information and send it in a fraction of the time it would take to send an analogue signal.

No less important than transmission of signals is switching, that is, the routing of signal traffic among a multitude of possible destinations. Digitalization offers the potential of vastly improved switching, including making switching completely electronic. Most telephone switching is now electromechanical, i.e., mechanical switches have to close before the circuit can be completed, even though the switches are electronically activated.

With computers taking over the job of switching, it is natural for the same computer to serve both as a data processing machine and as a message-switching machine. If required, the computer can store and forward messages according to established priorities. Utilizing either telephone or other communication lines, computers can initiate calls and hold "conversations" with other computers so that the distinction between data processing machines and a communication system is somewhat blurred. The computers of a data processing center that services many different subscribers are at the same time message-switching and message-forwarding machines as well as data processing instruments.

COMMUNICATION SATELLITES

In the early 1960's it appeared that satellite systems would be quite costly in the foreseeable future and therefore attractive

only for long-distance transoceanic traffic. Pessimism arose primarily from the belief that any system technically feasible in the near future would have to be of the "random orbiting" variety, that is, having a large number of satellites, each orbiting several hundred miles above the earth and requiring perhaps ninety minutes to make a complete revolution. Such a system would also require transmitting and receiving ground stations with large and expensive tracking antennas in order to follow a particular satellite, to employ it as a communications relay to other stations also visible to that same satellite, and then to transfer to another satellite coming into view as the previous one drops below the horizon. Thus, with a sufficiently large number of satellites in the system, any ground station would be within sight of at least one satellite at all times.

The success of the second Syncom, launched in July, 1963, demonstrated the feasibility of a much more attractive system—one operating in "synchronous orbit." For this system, the satellite is placed at an altitude of about 22,000 miles above the earth's equator and its position is made virtually stationary with respect to any given point on earth. Not only does this permit a great reduction in the number of satellites required for basic global coverage (only three properly placed satellites are needed) but also, elimination of the continuous tracking requirement permits use of less elaborate and less costly ground stations.

Satellites of the sort now being employed suffer a severe handicap in that their output of electrical energy is very small—the equivalent of two or three lightbulbs! It is easy to understand why large and complex terminals on earth are required to receive, amplify, and convert into usable communications such a tiny amount of energy coming from so many thousands of miles in space. The earliest satellites scattered this energy not only over the entire face of the globe "illuminated" by the satellite, but also spilled it uselessly in many directions into the vast regions of space. Fortunately, satellite antennas are being perfected to concentrate satellite energy on much smaller areas of the earth, such as western Europe and the east coast of the United States. This capability constitutes a major break-

through because it will permit the use of much less costly earth stations. It has also greatly enhanced the feasibility of satellites for purely domestic or regional use.

In other major advances: more efficient solar cells have been designed to increase the amount of electrical power converted from the energy of the sun; improved electronics equipment has increased the efficiency of converting this electrical energy into usable communication capacity; and more powerful rocket boosters make possible the orbiting of progressively larger and heavier satellites. Use of synchronous orbits, directive satellite antennas, and other improvements have dramatically reduced the cost per circuit as shown in the following table. The orbital weight of the Early Bird satellite was less than 100 pounds, and the satellite scattered its energy not only toward the earth but into space as well, and had a per-year circuit cost of \$15,300. Intelsat III, by comparison, weighs a little over 300 pounds, has a directive beam that confines the energy to the earth, and has a per-year circuit cost of about \$1,450. Intelsat IV, still a couple of years from launching, will weigh about 1,200 pounds, will have antennas to confine much of its energy to smaller regions of the earth, and will have a cost of about \$500 per year per circuit. Table 1, based on Comsat figures, depicts these developments over the several Intelsat models.

Along with these technological advances, a global management consortium, INTELSAT, has had remarkable success in

TABLE 1.

Satellite	Year of first use	Number of voice-grade, two-way telephone circuits	Investment cost (US\$) per circuit per year
Early Bird (Intelsat I)	1965	240	15,300
Intelsat II	1966	240	8,400
Intelsat III	1968	1,200	1,450
Intelsat IV	1971	6,000	500

bringing together numerous countries to share the use of these satellites. Each country participates in ownership of the satellites in orbit—the “space” segment—roughly in proportion to each country’s relative use, and each finances and maintains its own ground stations (shared in some cases with neighboring countries). As of 1969, more than sixty countries were members of INTELSAT; by the end of 1969 more than forty earth stations were in operation or under construction.

With these technological advances, combined with the success of INTELSAT, satellite traffic is experiencing rapid growth. In the three-year period from 1966 to 1969, the number of hours of satellite television transmission across the Atlantic grew from 66 to 666, and the number of voice and telegraph circuits rose from 63 to 941.

The utilization of satellites will depend in part on their relation to more comprehensive communication systems. Should satellites be used mainly for international telephone and television transmission? Should they be used for domestic telephone and television communication? If they are used for domestic television, should they be used to interconnect CATV systems or to broadcast directly?

Let us look at the last of these questions first. If CATV achieves much of its potential and if satellites are used to connect CATV networks, why is there any interest in direct-broadcast satellites?

Even if CATV systems interconnected by satellite reached all households with TV sets, they would still not reach those individuals who are mobile and those who are outdoors, e.g., at the beach or camping. (Some, of course, would consider this an advantage.) Terrestrial TV broadcast generally does not provide a good signal to such groups, nor could it be expected to do so economically. A broadcast satellite could reach just about everyone everywhere and perhaps could do so economically. In any case, of more importance than reaching mobile vacationers is reaching rural residents. If cables provide large numbers of channels combined with high-quality signals to much of the urban population, the provision of an analogous service for the remainder of the population will become important. In time,

this latter purpose may be the primary justification for a domestic direct-broadcast satellite. Terrestrial broadcasting may interfere with direct satellite broadcasting, but this problem may be solved through the use of special techniques.

The use of satellites for international connections is attractive because of the low cost per circuit of satellites as compared with long submarine cables. Although satellites have a short life, on the order of a few years, and have a tendency to cease functioning suddenly, short satellite lifetimes of between five and ten years are not entirely a disadvantage, since the satellites can be amortized quickly and replaced by more modern equipment. Current regulations force satellites to split their business with cables. Recent heavy investment in the latter is thus being protected against satellite competition.

Whether satellites will be used for domestic interconnection depends to a large degree on economies of scale that future systems are likely to achieve. Satellites have to be compared with terrestrial microwave and cables as a way of getting messages and broadcasts from one place to another. The most likely use of U.S. domestic satellites in the near future may be for the distribution of network television (as in the USSR and in the Canadian system now under construction) and for emergency replacement of analogue and digital traffic made inoperative by outages or overloads of terrestrial facilities. One of its most important eventual uses, however, may be to interconnect the thousands of CATV systems and thus to provide a number of networks.

ULTRAMICROFICHE

Ultramicrofiche (UMF) is a microform printing process that allows up to 3,200 8½ by 11 inch pages to be put on a 4 by 6 inch card, usually transparent.⁹ These cards (fiche) are inserted in a reader, which projects the page to slightly greater than nor-

⁹ This is the current commercially available capability. National Cash Register has, however, produced a 1,245-page Bible on an area 1.5 inches square. Microfiche, as distinguished from ultramicrofiche, reproduces about 60 to 100 pages on a 4 by 6 inch fiche.

mal size on a screen. Being laminated, the fiche is durable and rigid, and is inexpensive (royalties ignored) when compared with the books the fiche contains. UMF offers an effective way to miniaturize libraries. A library of 100,000 volumes on UMF has the cubic content of about three filing cases.

The special readers that UMF requires are expected to cost somewhat over \$500 in large-quantity orders. Some readers are portable (about the size of an attaché case) and permit rapid positioning to the desired material. It is likely that costs will drop considerably in the future, just as the costs of microfiche readers are dropping. The U.S. Office of Education, which supplies some six million microfiche of research documents annually, is financing a project to develop a portable, low-cost microfiche reader.

Commercially produced collections of ultramicrofiche libraries are already being advertised. The first Encyclopaedia Britannica collection, comprising 20,000 volumes, is to be available in 1970. It will include only material on which there is no copyright problem, either because it is too old for copyright to apply or has been especially developed by Encyclopaedia Britannica. Other collections are planned. National Cash Register is advertising several collections in the social sciences, humanities, physical sciences, and various professional fields.

Competing modes of reproducing the printed page are being developed. The Columbia Broadcasting System has announced the development, in conjunction with a number of European enterprises, of a film cartridge with micro-images, which, when connected with a home TV set, will make about 500 books with an average length of 50,000 words available in a single cartridge of film tentatively priced at \$50. (The CBS statement did not refer to copyright questions.)

Micro-images are not of interest simply for the reproduction of books. Combined with high-speed retrieval and display instruments, they enable enormous savings in storage for business, government, professional, and scientific documents.

The reduction of material to such small dimensions also has important implications for information transmission and transportation. Images can be transmitted to distant screens if de-

sired and a hard-copy version produced. But when data can be reduced to so compact a form, such cheap, old-fashioned modes of transmittal as air mail and messenger boy take on new interest.

Social Effects

EDUCATION

The school and the teacher, and through the teacher, books, have been the principal means for the young to acquire knowledge and cognitive skills such as arithmetic and reading. The advent of electronic communications (radio, television), especially as supplemented by satellite and cable transmission, has added new sources to these traditional ones. Nonetheless, the one-way character of mass communication makes it more suitable for assimilation of information than for learning that requires performance. If and when two-way communication with computers is available in the home, the school will no longer have a monopoly on instruction in cognitive skills. To be sure, the school will also use computers, but computer-assisted instruction (CAI) will not be confined to the schoolroom.

In the meantime, the contribution of children to adult activities has been reduced as the child's labor and as economic activities generally in the home have declined. At the same time, the teaching of nonacademic tasks (e.g. driving a car) and the process of socialization have increasingly been transferred from the home to the peer group and the school. Just as children have become less important for many adult activities, so adults have lost some importance for children. In part this is a result of communication technology, principally television, which has subtracted some of the child's time from other activities, such as interaction with other persons, especially adults.¹⁰

Reduction of interaction between the child and adults is not

¹⁰ One qualification is immediately evident: television may provide two-dimensional adults instead of three-dimensional adults as socializing personages. Even so, because of the inability of television personalities to respond individually to the viewer, we can hardly speak of them as substituting for adults in the home or in the "real" environment.

necessarily bad. This depends on the relative quality of the socialization that replaces the missing parental influence. Replacement appears to be principally through peer socialization in the school and outside.

One consequence of the changes in communication technology may be that schools and other formal institutions will provide more and more nonacademic training and less and less traditional academic instruction. Schools will certainly remain necessary for setting standards and motivating children to seek out information or to learn certain skills; but the explicit teaching function of the school—at least of the teacher—in the traditional academic subjects may be reduced. The balance between school and other environments in fulfilling this function will in part depend on how barren or rich the child's non-school environment is.

One of the most problematic aspects of growing up for many adolescents today is entrance into a productive adult role. The family's ability to help in the transition has declined, and the school's has not correspondingly increased. The school will very likely become increasingly involved in guidance and counseling, and this may depend greatly upon electronic means. Even today, schools that have adopted flexible scheduling of the school's activities have ordinarily found it necessary to use computer scheduling. As the school's activities and student choices increase, this dependence will also rise. Simulation and games, some of which are likely to be computer-based, may be developed to help adolescents choose a career, train for management positions, and perform other adult roles. Both information and cognitive skills may be learned as by-products of this performance-training. The principal function of the schools will not be to provide the information, but to organize and manage "the games," to furnish, in effect, the settings in which performance learning will take place.

The school will likely offer more work-study programs, community projects, and action programs. As it encompasses more of the child's socialization, the school (or some other formal organization) will become more nearly a community, with members in responsible interaction with each other, in contrast to

the type of adolescent community (now found in many secondary schools) that is purely informal, has few collective goals, and thus has few norms by which to induce personal responsibility. Socialization in these schools is consequently based on continuous social competition for position, which may undermine rather than develop a sense of responsibility. The emergence of schools that will develop a sense of responsibility is not at all apparent at present, and it may well be that they will not evolve in this direction. Nonetheless, the ability of future communication devices in the home to provide some of the services now performed by teachers in the schoolroom suggests that the school will have more time available to undertake the child's socialization. If it does not do so, both the school and the nonschool environment may undergo stress as the latter becomes less and less able to fulfill the socialization function.

The availability in the home and school of, say, eighty CATV channels, satellite-cable connections, and direct broadcasting from satellites could reduce dependence on a physically present instructor. Introduction of the computer to instruct, but more especially to drill, correct, and examine, would reduce this dependence even further. Technical capability does not by itself guarantee application. However, the incentives for industrial and commercial enterprises to promote new devices and services virtually ensure that they are not overlooked. Indeed, a premature or misguided application of them may be stimulated, especially in fields such as education, where political influence is not unimportant and where the value of alternative expenditures is not easily established. Professional educational interests are also affected by the new possibilities, and may be expected to influence the pace and the direction of developments. A further incentive for the introduction of such innovations would be the hope of mitigating the effects of teacher shortages (both numerical and qualitative) and rising costs of education.

In the short run, cost considerations may dampen enthusiasm for TV and computer-assisted instruction and favor instead the educational uses of radio. Compared with TV, radio conserves bandwidth, and its dollar costs are a fraction of TV costs.

In addition, radio more effectively uses scarce talent for the preparation of good educational programs. Finally, in a number of educational uses, radio seems to have as great instructional effectiveness as TV.¹¹ But all these comparisons, especially the last, need additional research, as indeed do so many other questions in education that take on new dimensions in the context of electronically assisted education.

The computer, CATV, and satellites will combine to make education a more continuous process than it is now. Changing technology and rapid advances in science indicate the need for continuing adult education for all levels of workers, managers, and professionals. The computer, probably the most flexible tool ever invented by man, has especially increased the need for individuals who can accept a high degree of change in their way of life. Fortunately, man is the most flexible and reprogrammable of the animals; and fortunately too, as communication technology creates a need for retraining, it also provides at the same time new ways of doing it. One illustration of a process that no doubt will become widespread is the Medical Television Network in California, which provides professional TV programs for doctors and nurses.¹²

The future availability of, say, eighty CATV channels and radio in the ghetto could compensate in homes and schools for teacher shortages and inadequate educational investments. Adult education would also benefit. Many people now on welfare are given the choice of staying at home to take care of children or working at jobs for low pay and paying a babysitter to take care of children. Multiple-channel CATV would allow them to train while at home for better jobs. Under these conditions, welfare schemes might be able to develop incentives for self-education.

More attention has been devoted to the potential benefits of

¹¹ Radio, of course, can also be combined with visual aids (slides, film strips, printed materials), which are sent to the student or the school in advance of the broadcast, as in France.

¹² By being scrambled, these programs are limited to the medical profession; they are descrambled at the reception end, usually hospitals, since the descrambler is still fairly expensive.

communication technology for less-developed countries than for underprivileged areas in the United States. The use of educational television (and radio) via satellites for adults and school children in foreign rural villages has been much discussed. Educational TV has been used to good effect in Colombia, American Samoa, and India. A new program for India involving direct TV broadcasting to village receiving stations is planned for 1972 and is based on technical improvements that will permit the village stations to be equipped at an estimated cost of \$500 or possibly less for the quantities expected to be produced.

While it seems almost certain that such programs will spread to many parts of the world and will have considerable impact on children's education and on community life, this will not be without difficulties and perhaps setbacks. Serious problems arise in the use of television that have less to do with the use of satellites than with the supporting ground facilities. Personnel must be trained and motivated to use television properly. Equipment must be properly installed and maintained. Financial support must be forthcoming from a variety of government bureaus that often have little effective liaison. And, of course, the programs themselves must be produced. Were the countries involved willing to cooperate in the task of educational programming, the preparation of suitable programs might be a relatively minor problem. In fact, most countries hesitate to employ educational programs produced elsewhere. They want to maintain complete control over what is shown to their own students, and this requires them to bear the full burden of its cost. Investigation might provide means to overcome these resistances.

Bringing educational TV into the village square and the village school will not, of course, spare less-developed countries with only primitive educational facilities expenditures to encourage students to stay in school by providing schoolrooms, transportation, meals, and other services as well as educational programs. It is desirable to remind ourselves that television can furnish only a part of the total necessary educational effort.

The satellite, CATV, and the computer are not the only

communication devices important for education. At higher educational levels and for the general public, the availability of ultramicrofiche libraries and readers can make general and specialized reading materials far more accessible. Just as microfilm has enabled scholars to read manuscripts held in distant libraries, so microfiche can bring entire libraries of 100,000 or 1,000,000 volumes to places with limited library resources. Such a development illustrates the decreasing dependence of persons on the facilities of a particular location. Just as a student may, through satellite and CATV, receive instruction from educators in any part of the world rather than simply from "his" university, so the reader is released from dependence on local library resources or the need to travel to libraries in distant places. The student equipped with a personal, portable reader or with one accessible in his dormitory or library could be given with his course registration one, two, or three microfiche that would contain a large part of his course reading material. The easy availability of this material might conceivably induce a greater interest in humanistic and scientific literature than does a queue in the university library.

POLITICAL BEHAVIOR

As communications improve, so do the conditions for both centralization and decentralization of administration over larger areas. Although the command and control capabilities of current communications have reached the point where virtually a state of any geographical size under any political system may be at least technologically feasible, it is another matter whether this is true for any population size. As population increases, the "choreography" needed to coordinate a given level of freedom of choice seems to increase exponentially. This means that as population grows, the information and communication requirements for maintaining a given level of freedom (for most acceptable definitions of freedom) may increase as rapidly as or perhaps more rapidly than improvements in communication technology. Without modern communication technology, it would no longer be feasible to contemplate the

success of political systems involving a large amount of decentralized free choice.

As computer networks and "time-sharing for the masses" grow, it will be possible to organize political districts on other than geographical lines. It may be possible to have an even more pluralistic society than we do now, with each individual participating in many roles and associations.

Of more immediate interest is the relation of communication technology to the voting system and the electoral process. Computerized voting systems already exist, as does the possibility of cheating in computerized vote-counting. The danger of this is made all the greater by irresponsible statements of technicians in the computer companies who dismiss these dangers, perhaps because they interfere with the sale of computerized systems.¹³

An immediate improvement could be effected in computerized voting by standardizing voting machinery over the whole country, and by introducing an easy way to split one's ticket. Undoubtedly, many biases, attributable to differences in voting machines and listing procedures, currently affect voting results from state to state and from municipality to municipality.

The future availability of a CATV feedback channel in individual homes or on neighborhood computer consoles will facilitate holding "instant referenda." Complicated preferential voting schemes will also be technically feasible. In countries like France and Israel, with many parties and frequent runoff voting, the politically useful period of bargaining that takes place after an indecisive first round may be abolished in favor of an almost immediate second round or in favor of various complicated preferential voting schemes.

In many societies there are voters who take politics seriously, are fairly well informed, and have a clear position on a number of political questions. They are to some extent analogous to the intelligent buyer in economic theory. They have well-

¹³ Recently, computer experts from the RAND Corporation, Santa Monica, and the University of California at Los Angeles, in a private exercise, formed themselves into offensive (cheating) and defensive (detecting) teams to test the possibility of cheating and detecting cheating in the counting of votes in computerized systems. In all tests the offensive or cheating teams were able to win.

formed preferences and are well informed about available choices. Although the degree of influence of this class of voters is not at all clearly established, what influence it has probably depends on time lags in the political system that allow its influence a chance to operate on other sectors of the society. Communication technology may soon make it possible to shorten or eliminate time lags in the political process. Unless precautions are taken, this might reduce the amount of political discussion and the influence of thoughtful people over the more volatile sectors of the public.

There is a growing trend among candidates for political office to use sophisticated techniques to determine what image will best appeal to a given section of the electorate. Most candidates feel that general appeals are not likely to be persuasive in urban areas of great social diversity. To many candidates, the task of communicating with this electorate seems very difficult indeed. Campaigning today increasingly focuses on groups that might prove crucial to the candidate's victory. Census data, past election behavior, public opinion research, and a wealth of semi-public personal data (such as credit ratings, credit cards, magazine subscriptions, drivers' licenses, housing, etc.) have been computerized for many electoral districts. By applying this information intelligently, candidates can use a variety of media to make specialized appeals that emphasize those aspects of a candidate's image that each target group is likely to find most attractive and persuasive.

The current art of computerizing personal data for political appeals focuses on two techniques, each involving different media. The first technique combines the use of computers and available data about the electorate with information obtained from advertising agencies about the TV-channel and radio-station preferences of the various ethnic, education-income, and occupation groups in a given area.

The second strategy uses computerized personal data to generate a set of tapes, each of which contains a list of names selected according to some mix of variables. For example, one might isolate by name all the people in Los Angeles who subscribe to *The New Republic*, earn over \$15,000 annually, and

have a Diner's Club credit card.¹⁴ If some aspect of a candidate is believed attractive to such people or if a credible appeal can be created for the group, the candidate can write a letter for this type of person and send copies to all of them living in the Los Angeles area, for example. The number of different letters and hence the number of different name tapes that will be generated will, of course, depend on the candidate's awareness of the different types of groups and of the appropriate political appeals for each. (Naturally, one has to be careful about sending contradictory types of letters to the same person.) An impression of personalization can be conveyed by having the computer printer insert the recipient's name in his copy of the form letter.

In the future, as CATV channels become more specialized, it will be possible to use different appeals to different channels, each appeal designed with a particular audience in mind. This might prove considerably more effective than the broadly based and vague appeals often necessary when addressing present TV audiences.

Campaign strategists argue that the use of data banks in conjunction with different media allows politicians to return to the more personal communication with their constituents of earlier times. This may be true in one sense, but is inaccurate in another. The data bank does lead campaign managers to focus on the differences among groups in the population and to evaluate their relevance for elections. Perhaps politicians now have a more accurate view of the electorate and of policy options. However, no personal contact is involved in the use of data banks and the mass media. Feedback occurs only in a very gross, if definite, form: votes.

Computerization of data and its linkage to the mass media have increased the cost of election campaigning. No serious candidate in an urban contest can forego the use of data banks and mass-media appeals—the competitive advantage to the opponent would be too great. Yet the cost of these techniques is truly staggering to anyone without access to the type of financ-

¹⁴ Apart from other considerations, these practices raise questions about the invasion of privacy.

ing usually associated with major business investments.¹⁵ These high costs may make candidates more responsive to their backers, even though much of the money is spent to create the illusion of close communication with and responsiveness to the voters rather than to special interests.

It is wrong, however, to represent the new technology as primarily a force for evil. The availability of multi-channel CATV and later mass access to data banks holds the possibility of a better-informed electorate. However, the local programming which multi-channel CATV makes possible requires not only the technological capability but also the interest and desire of local groups to create the programs and maintain standards. Similarly, future access to politically useful data banks will not be of service unless the files of the data bank have been stocked by nonpartisan or multi-partisan personnel and unless incentives and capabilities exist for their use.

Multi-channel TV and data bank access will allow greater attention to be paid to local or other narrowly restricted interests. Satellite relays and direct broadcasts from satellites will, on the other hand, provide the means to reach broader and more distant audiences. Already, because of the transistor radio, many peasants throughout the world know more about world or national politics than they do about political events in their own immediate district.

The inexpensiveness, sturdiness, and portability of the transistor radio make it attractive to populations whose only prior contact with radio was a loudspeaker wired to a radio in some prominent local place. To the greater privacy of listening made possible by the transistor radio has been added a greater choice of programs due to an increase in the number of transmitters, which makes jamming and other forms of censorship more difficult. Radio range can now be measured in thousands of miles, while the range of television broadcasting is only in tens of miles. Broadcast satellites sending TV signals directly to home

¹⁵ For example, the primary and runoff campaigns of Thomas Bradley, the losing candidate in Los Angeles' 1969 mayoralty election, cost \$1.1 million, \$631,000 of which were communication costs. At the end of his campaign, Bradley's election committee was nearly \$300,000 in debt.

receivers (and not to a local relay broadcasting station) will provide TV broadcasting that is more difficult to censor.

The increasing speed with which the mass media disseminate news often means that information reaches the general public and political leaders at the same time. The latter can thus be questioned about, or asked to act upon, information which has just reached them, or, in some cases, may not yet have reached them. On the other hand, the new communication technology enables political leaders and administrators to react faster to a crisis. Groups can confer more quickly if they need only get to a special "secured" telephone than if they have to go to Washington. The time required to contact a person will decrease with advanced paging systems, that is, through pocket devices. Of course, it is not only crises that require consultation among political leaders and officials. The Metropolitan Regional Council of New York is currently trying to establish a two-way closed-circuit microwave system to connect twenty-seven urban and suburban municipalities. This TV network would enable local, state, and federal officials of the region to meet regularly, without traveling, to discuss regional problems.

Consultation with those who serve them is important for higher bureaucratic officials, but the pressure of time, the annoyance of travel, and the restricted access of different bureaucratic levels to each other make such consultation difficult. Future communication systems, especially the TV screen, will make it easier for those on top to confer with their aides and with those whom they otherwise might not see. Here, as in many spheres, technological possibilities have to be coupled with appropriate organizational design and incentives.

CRIME, SECURITY, AND PRIVACY

Considerable attention has been devoted to the use of new electronic and communication devices to combat crime and less to the opportunities these advances have created for new crimes or new methods of committing old crimes. We have already noted the possibility of manipulating computerized systems for

counting votes. In January, 1969, the Department of Justice confiscated shipments from Las Vegas to Haiti of electronic equipment designed for a different form of cheating, remote radio controls for roulette and other gambling equipment which permit the gaming table to "do everything but reach into the player's pocket and remove his money." A witness has testified before the New York State Joint Legislative Committee on Crime that criminal elements operating on Wall Street were recruiting better-educated people who knew "how to steal with an I.B.M. machine." The use of time-shared computers by corporations and other entities raises questions of improper access to important corporate information by criminal elements or by competitors (the two categories are, of course, not mutually exclusive). The availability of so much information in so compact a form and the possibility of altering operations on them raise similar questions, even where the information is processed on an enterprise's own computer equipment. Code systems have been devised that restrict access to computer data and computer operations to persons possessing the requisite code. These codes have been further differentiated to permit different persons access to different parts of the data system and computer operations. Although computer companies and service centers sound confident about the ability of their systems to maintain confidentiality, it is by no means clear that current schemes provide adequate protection. And it will probably not be clear until we have a better picture of the types of crimes and the size of gains that unauthorized access to computer systems will permit. Unauthorized access can be made not only at the computer system proper but also at transmission lines along which computer or other data are transmitted. Scrambling and descrambling as currently practiced are not necessarily adequate protection. Safeguards against unauthorized tampering with computer operations and communication lines, if at all feasible, may require physical redesign of these systems and not simply software and other subsequent security measures.

Enthusiasts for the "cashless and checkless society" of the fu-

ture seem equally confident that the individual's code for receiving and making payments via computers can be maintained inviolate. Of course, a system of computerized transactions in place of currency and checks (and perhaps bonds and stocks) need not be perfectly secure to work. The counterfeiting of currency and stock shares and the forging of checks today may be a greater source of loss than future criminal penetration of computer transactions.¹⁶ It is difficult to devise entirely new crimes, but the centralization of records and fiscal operations and the possibility of easier concealment of criminal activity may in the future increase the scale of crimes and also the safety of some types of criminal activity.

The new electronic equipment has indeed, however, served to fight crime. The greater speed of police and private reaction to an actual or potential crime, the instant availability of large bodies of data, and the increased possibilities of surveillance of public and private places will probably make some types of criminal activity more hazardous.

The FBI maintains a large fingerprint data bank that is accessible by telecommunications all over the country. Several states have developed or are developing similar data banks. A police agency can send a facsimile of a fingerprint to the central data file in less than a minute. Thus, a person stopped for speeding may be discovered to be wanted on a felony charge. For most practical purposes, monitoring systems combined with data banks could at some point in the future do away with anonymity. A national identification system similar to that used by some European countries, coupled with a computerized data bank, would facilitate surveillance of criminals—or anyone else.

Many commercial firms use a computerized system to monitor checks that is so fast that forgers are caught while trying to cash their checks. Gas station attendants in some parts of the country are now able to make an instant check on credit cards

¹⁶ Obviously there are problems involved here other than crime: the legal status of transactions with no supporting paper, and the individual's degree of confidence in the infallibility of the computer system.

presented to them and determine if the card has been stolen or if its owner is delinquent.¹⁷

The New York State Intelligence and Identification System (NYSIIS) data bank is a significant innovation. It unites the information possessed by the various law enforcement agencies, such as the police, the courts, penal institutions, and parole boards. Information is safeguarded to the extent that an agency furnishing information can specify the agencies that may have access to it. The NYSIIS facilities for telecommunications provide various degrees of security, depending on the sensitivity of the information being conveyed.

While instant identification systems will make it easier to apprehend criminals, mistakes in the system could lead to false arrests and embarrassments. Many feel that records of arrests not ending in convictions should be dropped from the files that will be transmitted to, for instance, the civil services in regard to job applications. Safeguards are also necessary to insure that statistical data systems are not used as intelligence systems, either by officials or others who might seek access to government records.

It is reasonable to expect an increase in the surveillance of public places. Television cameras are commonly seen surveying activities in industrial plants, banks, and high-traffic stores, and undoubtedly such monitoring will be extended to a variety of public places. The police, for instance, may wish to survey street corners, parks, or other areas. Traffic surveillance through radar has already become routine. Data banks have been used in conjunction with license plate checks to provide instant identification of scofflaws. Managers of large apartment buildings and commercial establishments may wish to cover entryways, hallways, stairwells, or elevators, either to restrict access by "undesirables" or to observe the conduct of employees or residents for various purposes.

Surveillance as an anti-crime measure is likely to increase the

¹⁷ This ability to check on lost or stolen credit cards does not prevent, and may in fact have encouraged, the criminal duplication of legitimate cards by penetration of the security system of plants producing the cards.

invasion of privacy and erosion of anonymity already threatened by other developments. Communication technology obviously makes access to private information easier. Sensor technology has already had a major impact on privacy and security. A "shotgun" microphone can pick up conversations several hundred feet away. Conversations in a room can be picked up from outside through sound vibrations from the window panes. There are myriad ways to "bug" a room. Telephones can be inconspicuously turned into microphones to record nontelephonic conversations occurring in the same room.

Governments, the police, and private organizations in the near future will have heightened information-gathering abilities, both to query records about individuals and groups and in the range and sensitivity of their physical sensors. Having sensors available does not necessarily mean that they will be used, but surveillance abilities will be great even if sensor technology remains at the present state of the art, which is rather unlikely. Nor can private recreational snooping be precluded. The use of television and other sensors to watch the baby, the backyard, or to monitor the front door has led to other uses of a less utilitarian character.

Technology now makes feasible computerized credit systems, which usually assume that a person's past behavior is the best indication of his present and future behavior. As one's past becomes accessible to others, one may be less able to disregard it, and be forced to "live it down." As credit becomes more common, so do the records of its use. These records reveal the places we stayed, things we bought, entertainment we purchased, calls we made, and so forth.

The more information accumulated, the more valuable it usually becomes. Statistical data banks developed by the government pose important questions. The proposed national data bank for the Bureau of the Census has become the subject of controversy over what will go into it and who will have access to it. The proposed system will combine information from the twenty government agencies that now maintain large data banks into a single store. At present there is a regulation that all government agency data must be computer-compatible, so

some coordination already exists. A national data bank may be of great use to social scientists and to the government, and it would permit large savings by eliminating costly duplication. However, although designed for statistical studies, it may be difficult to exclude its use as an intelligence system by overzealous officials and unauthorized private persons who may or may not have criminal intentions. Credit bureau and police intelligence data banks raise similar questions. To be sure, the latter can, for example, be used to justify "instant bail," in cases where a suspect is apprehended and his data file indicates he can be released on his own recognizance. But they can also be used for questionable purposes.

Heretofore, public and private spying has been limited by personnel costs; a few agents or persons cannot watch everything. The computer, however, can monitor a great number of sensors simultaneously and therefore economically. Depending on how sophisticated its recognition abilities are (and these will become increasingly more acute), the computer can be programmed to select objects, words, and actions that are of interest to the programmer. Car license plates are an elementary example. The computer can record location and other data for selected license numbers and alert the human monitor.

Different temperaments view these developments differently; it will probably take considerable analysis and finally experience to judge more accurately whether the optimists or the alarmists have the better case.

ECONOMIC LIFE

Developments in communication technology can be expected to have a great effect both on business organization and operations and on consumer shopping practices. Changes in business are already occurring and will no doubt proceed more rapidly than will those in consumer behavior. The latter requires the spread of communication devices on a scale that is not likely to occur for a number of years.

Business Organization. Many scenarios of the future envisage businessmen inundated by information. It is more likely, how-

ever, that executives, at least, will get less raw data and more information in useful summary form. This information will be available not only in the familiar computer printout but also in a number of computer-generated graphic displays. The significance of this for centralization or decentralization of business administration and control is still a controversial subject.

One effect of the general-purpose animal, man, working with the general-purpose machine, the computer, will be to reinforce existing tendencies for the corporation, and probably the trade union, to become multi-purpose, or to extend themselves over a broader range; for example, an automobile company may become a transportation company. Contemporary management technology may encourage the entrepreneur and business manager to broaden the scope of their activity beyond what originally seemed feasible or desirable.

It is likely that communication devices will soon play an important role in reducing administrative and especially distribution costs as they have already in reducing production costs. To be sure, the effectiveness of enthusiastically proclaimed "total management systems," made possible by computer and communication technology, will depend on intellectual advances in the construction of models relevant to corporate decision-making and to an understanding of the total economy. Management is likely to develop corporation policy more self-consciously, simply because businessmen will want to derive maximum advantage from the data storage and data processing capabilities of the computer-communications system.

In the past, the conduct of certain business enterprises seemed to be possible only through a concentration of men and paper in the same building, in the same urban area, or in the same city. The huge office buildings with which we are familiar represent one form of this concentration. Where this concentration does not in itself provide opportunities for face-to-face contact, inter-city and international travel provide businessmen and professional groups with the temporarily required degree of concentration. The larger part of airline space is occupied by business passengers. The new communication systems are likely to affect both the permanent forms of busi-

ness concentration and the temporary concentrations created by travel. Videophone and switched audiovisual communication systems in general are likely to reduce the need for business and professional travel, at least where such travel is not considerably stimulated by obvious additional reasons having little to do with business or professional necessities. Videophone will not only reduce inter-urban and intra-urban travel, it can also reduce traveling along the corridors for intra-office business. When Westinghouse introduced Picturephones experimentally into its New York and Pittsburgh offices, it found that people used them to talk to colleagues down the hallway, as well as to more distant associates. Westinghouse and Union Carbide trials apparently indicate that Picturephone tends to restrict conversation to the immediate subject that motivated the call and reduces informal extensions of the time and subjects of conversation that occur during face-to-face office visits. Whether this is good or bad is another matter, although there is a tendency to interpret the results as an increase in efficiency.

Facsimile reproduction, ultramicrofiche, and data transmission capabilities in general will provide additional incentives for remaining where one is. These various communication systems permit quick reaction to pressing problems: conferences can be arranged with participants who are scattered about the country or the world, and relevant background information, in hard copy or visual display, can be provided to everyone within minutes. What effect this will have on the quality of rapport and thought is difficult to say, but it is certainly likely to conserve the energy and time involved in travel. Naturally, a willingness to substitute audiovisual for face-to-face communication will develop slowly until present limitations in both viewing and cost give way to the cheaper and far more adequate wide-screen, color-TV switched networks of the future.

It is possible, indeed likely, that the use of the new communication systems for avoiding business travel may be of secondary importance compared with their effect on the daily journey to work. And, indeed, just as airline and transportation executives are becoming sensitive to the effect communication

technology may have on business and private air travel, so automobile manufacturers are already alert to the impact of communications on the journey to work, which at present is a major reason for the purchase and use of motor vehicles. For some professionals and for some businessmen, the availability of computer consoles and communication terminals in the home has already led to an increase in the amount of business transacted from the home, reducing the amount transacted from the place of business. Some businesses have already provided their personnel with home terminals that permit them to transmit orders and other data to the company's computers, which then automatically prepare shipping orders, invoices, and loading instructions and record inventory changes. Sales and other personnel are thus freed from the need to return to the office to prepare written reports.

The pace of these developments will be affected by the availability of personnel to implement the array of alternative futures. Twenty years ago the computer field did not exist. Since then new jobs at all levels have been and are still being created. Some jobs have been of relatively short duration. The programmer of today is considerably different from the programmer of fifteen years ago. Key-punchers may shortly suffer technological obsolescence. Our ability to distinguish between computer personnel and communication personnel is declining. Experience of the last few years indicates that the demand has constantly outstripped the supply. The bottleneck in people may occur in completely unexpected areas. Within a few years, the lack of telephone or television engineers may slow technological applications more than will the lack of programmers.

Marketing and Shopping. In the future, marketing is likely to change in several ways. Over the near term, CATV will be the main agent of change. In a longer period, say, twenty to thirty years, it will be switched audiovisual and computer systems.

CATV offers several possibilities. A large number of channels (say, 40 to 400) and local programming will decrease the cost of advertising broadcasts. At the same time, it will be pos-

sible to provide for a reaction, including a signal to purchase, using the narrowband feedback link. One or more local advertising channels could be established with a regular schedule of product offerings. This would allow mutually interested advertisers and consumers a better chance of contact. There are many ways, technically, of getting a signal from the home to the advertiser to tell him which people have ordered his product. The costs of doing this are so modest that if political obstacles to such systems were removed tomorrow, within ten years there could well be a great change in advertising and shopping practices.¹⁸ In any event, business and institutional buyers are likely to lead the way toward electronic shopping.

The truly radical innovations in marketing will come with the widespread use of switched audiovisual systems and time-shared home computer consoles. This will enable a great deal of shopping without leaving the home. It will be possible to "videophone" a particular store, have a product displayed, and discuss its merits with the salesperson. Alternatively, one might consult the computer, which could act as a much more efficient and vastly more detailed set of "Yellow Pages." The home console could display or print out names of stores, product specifications, and other information that might be required. Various products and brands would be visually displayed for the consumer, who could then order immediately via his console or else phone a particular store for more detailed visual inspection and final purchase, which would be charged against his central, computerized bank account (see "the cashless and checkless society"). It is unlikely that electronic shopping will entirely replace direct shopping, which, after all, serves purposes other than simply acquiring merchandise. Besides, buying often involves senses other than vision and hearing. Nonetheless, in the future, electronic shopping will undoubtedly make a large dent in the amount of private and public trans-

¹⁸ Of course, direct selling on TV is practiced today in the sense that people are given a phone number and can call in an order for something that has just been advertised. Enabling the CATV subscriber to push a button may not have much additional impact. However, the amount and detail of advertising on, say, an eighty-channel CATV system could make a great difference.

port required for shopping, and will thus reinforce the communications-versus-transport competition already noted in connection with business travel and the daily journey to work.

As the cost of information processing decreases and its speed increases, the consumer may have greater opportunities to obtain merchandise suited to his particular needs and specifications. The computer control of manufacturing processes makes it possible to change settings on machines without the manual adjustment of each control. Extension of this computer control to permit on-line changes in product specifications will make customized products cheaper. For some products, customization may become the rule rather than the exception.

REGULATION

Regulatory problems arise in connection with two types of communication enterprises—common-carrier companies providing point-to-point communications (telephone and telegraph), and companies engaged in mass communications (radio and television broadcasting). Since communication satellites and coaxial cables can be used for both point-to-point and broadcast communications, it is increasingly difficult to keep these two types of communication services distinct. Government regulation of communications will need to deal with entities whose communication functions are more diverse than at present. Similarly, the separation of private and common-carrier communication systems is no longer clear-cut. Private microwave systems received an important stimulus when the Federal Communications Commission ruled in the Carter-fone proceedings (1968) that “foreign attachments” to telephones were permissible, thus facilitating the tie-in of private microwave systems to common-carrier telephone lines.

Spectrum Allocation. One of the most serious regulatory problems at present concerns the allocation of the electromagnetic spectrum, which is becoming very crowded in some urban areas. The UHF portion of the spectrum is useful for television broadcasting, landline microwave, satellite-ground communications, and mobile radio. But the UHF television broadcasting

stations have made large investments in their equipment, and have been supported by the Federal Communications Commission; it may be difficult to get spectrum space now allocated to UHF TV stations reallocated for other purposes. Ultimately, however, radio communication over the air may be reserved for communication with vehicles,¹⁹ and most other transmissions may take place through cables. In the meantime, competing demands for spectrum will continue to increase rapidly in the near future.²⁰

As satellites and their capacities multiply, new spectrum allocation problems will arise, requiring international cooperation and regulation. Satellites in synchronous orbits are confined to a narrow band around the earth; two satellites employing the same radio frequency and placed too close together in the equatorial plane cannot be separated by the ground antenna beams and thus can interfere with each other. Since a minimum distance must be maintained between adjacent satellites, only a limited number of orbital positions are available around the world. As traffic expands, considerable regulation may be required.

Satellites may also interfere with terrestrial systems (for example, microwave facilities) when both systems attempt to share the same frequency. Unless satellite ground stations are properly located and shielded or unless precautions are taken at microwave relay sites, serious interference may occur. Careful design and cooperation in the "reasonable" allocation of radio frequencies can prevent these problems from being too serious.

Costs and Rate Structures. A conflict exists between exploit-

¹⁹ Mobile radio includes radio for police, fire, hospital, military, and various other public-service vehicles, as well as an increasingly large number of commercial and private ones. In 1967 there were about 2.5 million mobile transmitters, excluding those operated by the common carriers.

²⁰ Bandwidth problems are not limited to signals which are propagated through the air as in broadcasting. Picturephone is now designed to use a 1 MHz analogue bandwidth over the ordinary telephone wires between the subscribers and their local telephone central offices. This is not compatible with the 6 MHz channel bandwidths used for commercial TV. Over the next thirty years, Picturephone may grow to represent a capital investment of \$50 billion or more, and the investment in CATV could be almost as much.

ing the efficiencies of large-scale systems and satisfying the specialized needs of particular countries and regions. Large reductions in cost per circuit are afforded by using satellites that have high capacities. But high capacities are, in most cases, far greater than can be fully used by single countries. The rationale for INTELSAT was to develop high-capacity systems on a global basis so that member countries could take full advantage of their economies. However, separate satellite systems are being considered to satisfy more specialized needs and to permit closer control by the particular country or regions involved. For example, satellite systems are being considered in the United States to transmit television programming from central locations to broadcasting stations around the country. Canada and Europe have also talked about such systems.²¹ If they can be operated without harm to the basic global system, it is all to the good. But if domestic or regional systems grow to large proportions, they could seriously disrupt traffic for the global system and a multitude of separate, competing satellite systems could emerge—each small, each high-cost on a per-circuit basis, and together denying the countries the efficiency of a large-scale shared operation. Clearly, international cooperation will be required if satellite technology is to be fully exploited for the public benefit.

Rate structures and regulatory principles can either encourage or discourage the development and introduction of new communication technology. It is commonly the case throughout the world today that the underlying costs of performing a given, specific communication service, such as a particular telephone call between New York and London, may bear little relation to the price paid by the person placing that particular call. The reason for this is that a "composite" price or rate structure is usually employed, which reflects the cost of both new and old technology and routes of both low-traffic density and high-traffic density. This practice arises for two principal reasons. (1) When a particular telephone call is routed between

²¹ Canada has set up a new department of communications at the cabinet level; has created a new corporation, Telesat, to operate its satellite system; and is proceeding rapidly toward an operational capability.

two points, it may use a variety of old and new facilities and the particular route may depend on a number of random factors. For example, a call between New York and London might go over either cable or satellite and, if over cable, over either the very newest or the one laid in 1956. It is generally argued that the cost of placing the telephone call ought to reflect an average of all of the costs of the whole network and mix of facilities. (2) It is widely held that certain services ought to subsidize others in the interests of the general welfare. Revenues from high-density urban traffic are sometimes used to help support the less profitable rural routes in the interest of developing a broad, nationwide communication network. Similarly, profits from international traffic sometimes help to support domestic services. Composite pricing and subsidization will continue to be major elements in cost policy in the communication field. Nevertheless, it may be possible in the future to relate prices more closely to specific costs in order to enable new technologies to reap greater benefit from their cost savings and thus promote their development and use more effectively.

CATV

CATV involves a host of regulatory problems. At present the most controversial is CATV's actual and potential competition with terrestrial broadcast television, especially UHF. Because CATV re-sends signals that are copyrighted, but is not required to pay copyright royalties, the CATV importation of signals into an area well served by local broadcasting stations can provide "unfair" competition. As one response to this threat, the FCC has generally not permitted CATV systems to bring distant TV signals into the largest 100 metropolitan areas (where more than 80 percent of the population live). However, a preliminary vote by the FCC in May 1970 seems to presage more-or-less unlimited importation of out-of-town programs on CATV systems.²² The present television industry is also threat-

²² If implemented, this plan would divert 5 percent of the income of cable companies for educational programming, would require cable companies to pay a certain percent of their income to copyright owners, and would permit local

ened by the desire of the cable companies to originate TV programs over their own cable systems and by attempts to promote pay TV. One response to the problem of cable competition might be to make the cable system a common carrier, open to anyone willing to buy time and including special provisions for educational and public-service broadcasting.

Changes are occurring so rapidly in CATV technology that a certain amount of regulation of or perhaps cooperation among involved parties will be needed to prevent wasteful developments. In two or three years a single CATV cable will be able to carry 40 channels at little additional cost. In ten years or more, 100 channels on a single cable are likely. If four of the new 20-channel cables, together with their amplifiers, were installed in a single duct in one operation, it would be possible to have an 80-channel TV system tomorrow. Economical expansion, or even development at a much slower rate, requires planning and regulation of installations, especially underground ducts, to permit the latter to take not only television cables but also expanded underground installations for telephone, power, gas, and water. It may soon become standard practice to install underground broadband cables during the construction of new housing tracts, as in the Columbia, Maryland, development. Large economies would be possible if several cables were installed initially even though they were not used immediately.

The components of CATV systems, produced by many small firms, lack standardization, and the installation of systems is often of low quality. It is not at all clear that regulation is the solution to such problems, but efforts to prevent the hodgepodge that now exists among the 2,300 CATV systems from occurring on a larger scale in the future are indicated, since some interconnecting of CATV systems is almost certain to occur.

Regulation of Computer Services. The computer services—information storage, retrieval, and processing—are not now regulated. Indeed, the extraordinary development of the com-

high-frequency stations to receive revenue from the local advertising that replaces commercials on imported programs.

puter field may be due to the absence of government regulation and the stimulus of a very vigorous competition. The provision of transmission services by companies that provide computer services will raise regulatory problems in the computer field. The lack of adequate data transmission facilities may soon become a serious bottleneck in national data processing. Since the needs of data processors, who now use telephone lines, are significantly different from those of the average telephone user, present regulatory policy is already proving inadequate. This will become increasingly the case as firms whose data needs are small operate through an inexpensive access terminal and simply lease computation from a large computer facility center.

There is a reason other than its communication services that may warrant the regulation of the computer facility center, namely, the protection of private data from eavesdropping and criminal manipulation. A first step in getting more adequate protection will be to destroy the myth that adequate protection already exists. The licensing of computer executives, programmers, repair and maintenance men, and designers responsible for computer operations may become necessary, but obviously cannot in itself guarantee the inviolacy of the computer system. Appropriate legal measures and improved basic design will also be needed to provide greater security.

Copyright. In June 1968, the U.S. Supreme Court held that CATV operators who capture television signals and transmit them by cable to subscribers are not subject to copyright liability under the law.²³

Facsimile transmission and microform reproduction of copyrighted materials involve interesting legal questions which are not likely to be resolved until these new devices for symbol storage and transmission of printed data have become fully developed and more widely used. The U.S. Copyright Act protects the right of the copyright holder "to print, reprint, pub-

²³ *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1967). In another case, the Court did decide that the FCC had jurisdiction to regulate CATV. The Commission's regulatory actions have, in effect, limited the growth of CATV. See, however, the reference to recent FCC action, above.

lish, copy, and vend the copyrighted work." This applies also to audiovisual materials, e.g. filmstrips. The microform reproduction of copyrighted materials covers several different cases: (1) printed books in collections held by private individuals and corporations or by private and public libraries may be copied on microform (in a few or many copies), and such copies made available to the general public, and (2) copyrighted materials may be reproduced by microform for commercial sale. Either case involves a technical copyright violation, although publishers and authors tend to ignore infringements made by the single-copy, noncommercial reproduction of their materials. That publishers are indeed concerned, however, about the spread of this practice, is indicated by the following somewhat hysterical warning appearing in a 1968 book: "All rights reserved. Except for use in a review, the reproduction or utilization of this work in any form or by any electronic, mechanical, or any other means, now known or hereafter invented, including photocopying and recording, and in any information storage and retrieval system is forbidden without the written permission of the publisher."²⁴

A way may be found, under the law, to protect authors and publishers and the public interest without making the further development of microform libraries too expensive. For the time being, the complex technology involved in ultramicrofiche (UMF) and the high cost of production will probably prevent UMF piracy of copyrighted publications. If and when more accessible technology and lower costs enter the picture, the evasion of royalty payments may become a more serious issue.

One feature of microfiche development may be a renewed emphasis on the classics, where, in this context, a classic is a book whose copyright has expired.

Censorship. Any communication raises questions of possible censorship, formal or informal. The future availability of 100, 200, 300, or 400 TV channels will raise new questions. Many programs may be produced by local or other groups who have

²⁴ Ernst Kjellberg and Gösta Säfllund, *Greek and Roman Art* (New York: Thomas Y. Crowell Company, 1968).

access to the cable system as an inexpensive public utility. Perhaps the rich variety of programs thus made possible by a super-multi-channel TV system will reduce problems of "equal time." Since, however, for many persons the right to say what they think does not always imply a similar privilege for those who have different views, the involvement of the public in the production or sponsorship of TV programs may raise political passions difficult to regulate. Educational TV may be no less controversial. Multi-channel TV can vastly extend opportunities in the home to study languages, pottery, plumbing, astronomy, astrology, sex technique, religion, and higher mathematics. There is no doubt that it will be possible to provide a great part of a university education and much vocational training through skillful use of the facilities that will be available in the home. But it is not clear that controversies over the content of education in schools and universities will disappear when these contents are transferred to the TV screen. Nor is it at all certain that all groups in the society will be happy to accept increased access to TV by astrologers, scientologists, and other elements of dubious repute whose ability to manipulate human apprehensions may be limited chiefly by the possible fragmentation of future TV audiences rather than by the force of competing views. In any event, whether regulation of content occurs or not, it is likely that various groups in the society will seek to have such regulatory action taken.

LIVING

In a number of specific areas, some of which have been reviewed above, it is possible to see the blurred outlines of the impending future. It is not easy, however, to capture from them an image of what the communication revolution will mean for the character and quality of life in the 1970's and 1980's, difficult in any case to envisage without considering other important changes. We know, now, much about the speed and cost of storing, transmitting, and manipulating signals; something about the increased variety of contents and applications that will be possible; but little about the quality,

from various standpoints, of what will be transmitted or the human attributes or social conditions required for these contents to be effectively produced, used, and enjoyed. Some of the more enthusiastic accounts of the future tend to ignore the amount of individual determination, discipline, and energy needed to extract the projected cultural benefits from the materials that may be made available by the communication explosion.

A review of today's TV fare might make the vision of a 100- or 200-channel TV system paralyze all thought. There is no reason, however, for an increase in some of the parameters of a system necessarily to produce a deterioration in system outputs. In fact, an increased number of TV channels implies an increased specialization of programs and consequently, for particular groups, programs of increased relevance and utility. Increased specialization also suggests that many types of talents and enthusiasms that now contribute little or nothing to TV or other public programs may have greater opportunity for expression. Perhaps this will permit an increase in programs without a drop in quality. It is true, nonetheless, that technique sometimes dominates content (as in some teacher training), and it cannot be assumed that programs for rose cultivators, chess enthusiasts, and stitchery connoisseurs will not sacrifice some substantive appeal in order to conform to prevailing habits and dicta of specialists in presentational technique.²⁵

It is not clear who is going to pay for all these programs, not that future costs of production and dissemination need be very high, at least compared with present costs. The interest in who will foot the bill derives from its relevance for who will have access to and control over the TV screen. Presumably, many programs with an explicit or formal educational and job-training content will be paid for by public authorities, private edu-

²⁵ A trivial example: One can observe on some noncommercial stations announcements made in the same theatrical voice and style of the circus barker and the street-corner huckster common among announcers on commercial stations. Apparently on noncommercial as well as commercial programs, failure to achieve a dramatic note in prosaic statements implies an absence of professional expertise.

cational institutions, or possibly industrial and commercial groups. Popular entertainment may continue to be dominated by commercial sponsors who want to keep a name before the public, with additional commercially (or consumer-) sponsored channels providing shopping or buyers' services with greater product specification and less medicine-man or soft-sell advertising. Many religious, political, hobby, and cultural programs will probably be sponsored by private groups whose resources may not have to be too great to acquire time on multi-channel cable TV. Any serious attempt to forecast the financial structure of cable TV, including pay TV, will need to consider its evolution through a number of different technological and economic stages, and also a host of political-regulatory issues. Here the point is simply to emphasize that predictions of the character and quality of future communication contents require a prior or accompanying scenario of the economic structure and regulatory practices affecting communication enterprises.

The ability to carry on an increasing amount of educational, business, and professional activity, shopping, and spectator entertainment in the home, together with lessened requirements for business travel, suggest more opportunities in the future for families to be together in the home and a decline in other kinds of togetherness. There will be some obvious sources of resistance to this development, which an affluent society may overcome in part by increasing the size of living units to provide greater privacy and by installing more TV screens in the household to accommodate the multitude of choices and tastes.²⁶ Projections about increased family togetherness, like many other guesses based on a single dimension of change, tend to presuppose a continuation of other basic characteristics of social life. In fact, other developments, for example, increased income, greater familiarity with other parts of the world, and lessened costs of travel, might encourage family dis-

²⁶ In the longer-term future, these choices, it is useful to recall, will also include hard-copy and display materials on console screens as outputs from newspaper and other subscription services and in response to interrogations of data banks and other computer services. The ability in the home to have audiovisual contact with people outside the home may have some effect on family togetherness, just as does the young adolescent on the phone today.

persal. Developments in communication technology suggest, then, not that family togetherness will necessarily increase, but simply that there will be greater incentives to conduct various activities in the home.

The ability of communication devices to lessen dependence on face-to-face relations raises questions about the losses and gains sustained thereby. Personal relations will presumably still involve direct contact, although the pen-pal may give way to the videophone-pal. The more extreme cases of substitution of machines for face-to-face contact will presumably occur not in social relations but in business and some types of professional services. In the future, economy of travel and professional time will increasingly dictate the use of computers and communication devices in place of direct contact between the professional man and his client. Already, Massachusetts General Hospital in Boston has set up a "telemedicine system" with Logan Airport, which permits direct consultation over a television channel about the medical problems of airport personnel that do not warrant immediate hospitalization.

Whatever can be electronically recorded, such as pulse, EKG, blood pressure, and temperature, can also be stored and transmitted. The automation of diagnostic information will mean the storage of and rapid access to audiovisual medical records, and the ability to transmit them quickly wherever they may be needed, a great advantage in areas where only medical technicians are available. These records will also be useful in medical education, including the continuing education of physicians.

Monitoring of patients is often unsatisfactory in a large hospital, especially when there is a shortage of staff. Serious changes in a patient's condition often fail to be noticed until too late, even by the most dedicated nurses. The computer has already become an important adjunct in the collection, processing, synthesis, and display of hospital patient data, not as a substitute for medical personnel but as an amplifier of the staff's abilities.

Of course, professional services are not confined to the analysis and dispensing of technical information. The minister, the

doctor, and the lawyer not only furnish advice, but also sustain hope and give consolation to people in personal crisis. The nonhuman element in the electronically aided practice of medicine will indeed deprive people of some of the psychological comforts provided by the doctor, although the popular esteem for and awe of the computer may inspire in some patients as much confidence and comfort as the time-pressed and fallible doctor. Besides, the computer-aided doctor may be able to spend more time attending to the patient's psyche, although it is not at all clear that professional, financial, or other incentives for this will exist. In any case, telecommunications and the computer will make available to him the help of specialists and bodies of information and analysis that should improve his professional services and enable him to share with the computer the esteem of his patients.²⁷

Some of the applications of communication-computer technology to professional services may be enjoyed first by low-income groups, since improved professional services for these groups might otherwise be difficult to assure. On the other hand, the home devices of the future, especially audiovisual two-way communication with home computer consoles and print-out terminals, will initially be the playthings, the status symbols, and finally the useful home appliances of the well-to-do. If having these devices in the home confers, as some believe, a marked educational, cultural, or economic benefit, then an interim advantage to the well-to-do will thereby ensue. It is difficult to predict just when these devices will be available at a price that will permit mass consumption.

There are, of course, plenty of enterprising persons eager to bring to the less-educated or the more easily put-upon members of our society the benefits of computer technology by providing them with computerized horoscopes, social partners, and life mates. The breakdown of machines in these areas or the

²⁷ There is, perhaps, a tendency to expect a greater impact of some technological applications than past experience warrants. Has the doctor's substitution of the electrocardiogram for the laying on of hands and the stethoscope reduced rapport with his patients? Is there a great difference between being wired to a computer and being wired to an electrocardiograph? Of course, if the doctor largely steps out of the picture, a decisive difference occurs.

fallibility of the advice they dispense are not likely to occasion severe social crises. However, a large dependence of some social systems on computer-communication technology could lead to major difficulties in the event of electronic errors or because the human servants of the machine are not up to their jobs.²⁸

It is not clear whether a future world of time-shared computer systems will require that most individuals have a higher level of education and intelligence than today. Mass literacy was needed for the development of societies such as the United States, but perhaps a world divided between a small elite and a multitude of relatively ignorant workers is again in the making. On the one hand, chances for a genuinely literate society would appear to be improved by the developing communication systems. But the effects that an increasingly complex technology will have on requirements for and standards of individual performance are not self-evident. With improved audiovisual communications and automated correction systems, literacy may become less important for many activities. An optimistic view is that any additional sophisticated service available in the society is a gain for the individual. A pessimistic view considers the possibility that society might evolve into a situation with users on one side and system designers, producers, and manipulators on the other side. It has been said of the United States Navy Logistics System that it was a system designed by geniuses to be run by idiots. True or not, this at least succinctly states one possible form of the developer-user relationship.

The data banks and interlinked computer systems that may be used by individual householders in perhaps the next twenty years will change by orders of magnitude every few years. Human beings, on the other hand, are not going to change by orders of magnitude every few years. We already see a whole series of elaborate games called "blame the computer" if any-

²⁸ Of course, if the relevant sciences provide reasonably well verified theories, then by varying the parameters according to different assumptions about the future we could derive some useful inferences. Unfortunately, in only a few relevant areas is theory this well developed. Still, social developments are rarely so discontinuous that a good social scientist cannot usefully apply his knowledge to analysis of the future.

thing goes wrong. Often it is quite legitimate to blame the computer; often, it is not.

It is by no means clear what the consequences are of supplying a greater and greater number of people with tools whose implications they scarcely understand. A communication device that does not merely transmit information (like the telephone) but is capable of manipulating information (like the computer) poses problems far more difficult than have been faced before. Many areas of apparently legitimate scientific or administrative activity may be able to flourish in an arbitrary manner, with hundreds of thousands of users all thinking that somebody else is "minding the store" at the data base. Many of them will be thinking, "There are intelligent people somewhere in the system who really understand what is going on and who have got everything arranged so that the service is just right for me." Perhaps there is an upper limit to the degree of complexity a system can tolerate before breaking down, unless the individuals operating and using it have themselves changed as much as the systems they use.

ARTHUR C. CLARKE

*Beyond Babel: The Century
of the Communications Satellite*

Mr. Clarke, who is often called "father of the communication satellite" because of his historic article on "Extra-Terrestrial Relays" in *Wireless World* in 1945, now makes his home in Ceylon. Fittingly, this is near the magnetic node where many of the synchronous satellites will come to rest after their fuel is used up and they can no longer maintain their orbital positions. He has maintained a continuing interest in space travel (as his best-selling volume *2001* indicates) and in the use of space communication. The article in the following pages was given as an address to a UNESCO Conference on Space Communication in Paris during December, 1969, and is reprinted here by permission of the author and by courtesy of UNESCO. It represents some of the author's later thoughts and hopes as to what communication satellites might mean for home life, for urban dwelling, and for nationalism. He sees the satellites as one hope that mankind may finally become "one people and . . . have all one language, and this is only the beginning of what they will do."

Introduction

THERE IS NO LONGER any need to argue that the communications satellite is ultimately going to have a profound effect upon society; the events of the last ten years have established this beyond question. Nevertheless, it is possible that even now we have only the faintest understanding of its ultimate impact upon our world. The main purpose of this address is to explore some of the further vistas which may be overlooked in our concern with more immediate problems.

Now, I am well aware that the main goal of this conference is to deal with such problems, many of which are so complex that those who have to solve them may be justifiably impatient with starry-eyed prophets gazing twenty, thirty or forty years ahead. It is necessary to keep a sense of proportion: at the same time we should never forget the goals toward which we are ultimately heading—even if those goals are still vague and ill-defined.

But before I attempt to outline the future, I would like to deal with some possible criticisms. There are those who have argued that communications satellites (hereafter referred to as "comsats") represent only an extension of existing communications devices, and that society can therefore absorb them without too great an upheaval.

This is completely untrue.

I am reminded rather strongly of the frequent assertions, by elderly generals immediately after August, 1945, that nothing had really changed in warfare because the device which destroyed Hiroshima was "just another bomb."

Some inventions represent a kind of technological quantum jump which causes a major restructuring of society. In our century, the automobile is perhaps the most notable example of this. It is characteristic of such inventions that even when they are already in existence, it is a considerable time before anyone appreciates the changes they will bring. To demonstrate this, I would like to quote two examples—one genuine, one slightly fictitious.

For the first I am indebted to Anthony Wedgewood Benn, now U.K. Minister of Technology, who passed it on to me when he was Postmaster General. I am speaking from memory, so I do not guarantee the exact accuracy of the quotation.

Soon after Edison had invented the electric light, there was an alarming decline in the stock exchange quotations for the gas companies. A Parliamentary commission was therefore called in England, which heard expert witnesses on the subject; I feel confident that many of these assured the gas manufacturers that nothing further would be heard of this impractical device.

One of the witnesses called was the chief engineer of the Post Office, William Preece—an able man who in later years was to back Marconi in his early wireless experiments. Somebody asked Preece if he had any comments to make on the latest American invention—the telephone. To this, the chief engineer of the Post Office made the remarkable reply: "No Sir. The Americans have need of the telephone—but we do not. We have plenty of messenger boys."

Obviously, Preece was completely unable to imagine that the time would come when the telephone would dominate society, commerce, and industry, and that almost every home would possess one. The telephone, as it turned out, was to be slightly more than a substitute for messenger boys.

The second example is due to my friend Jean d'Arcy, who is familiar to all of you. He has reported to me the deliberations of a slightly earlier scientific committee, set up in the Middle Ages to discuss whether it was worth developing Gutenberg's ingenious invention, the printing press. After lengthy deliberations, this committee decided not to allocate further funds, for reasons which I am sure you will agree are extremely logical, and which may strike some responsive chords. The printing press, it was agreed, was a clever idea, but it could have no large-scale application. There would never be any big demand for books—for the simple reason that only a microscopic fraction of the population could read.

If anyone thinks that I am laboring the obvious, I would like him to ask himself, in all honesty, whether he would have dared to predict the ultimate impact of the printing press and the telephone when they were invented. I believe that in the long run the impact of the communication satellite will be even more spectacular. Moreover, the run may not be as long as we think, and at this point I would like to assert my dubious claim of being a somewhat conservative prophet.

Until very recently I was under the impression that I first advanced the concept of the synchronous comsat in the well-known paper published in *Wireless World* for October, 1945. A few months ago, to my great surprise, some friends in the Ceylon Broadcasting Corporation unearthed a letter of mine published in that same journal for February, 1945, which I had completely forgotten. It suggested that V₂ rockets should be used for ionospheric research, but the concluding paragraphs described the synchronous communications satellite network that contained the now rather comical phrase: "a possibility of the more remote future—perhaps half a century ahead." I was bravely risking ridicule, predicting communications satellites by 1995!

This is the reverse of the usual tendency, which has often been pointed out, for technological forecasts to be overoptimistic in the short run but overpessimistic in the long run. The reason for this is really rather simple. The human mind tends to extrapolate in a linear manner, whereas progress is exponential. The exponential curve rises slowly at first and then climbs rapidly, until eventually it cuts across the straight-line slope and goes soaring beyond it. Unfortunately, it is never possible to predict whether the crossover point will be five, ten, or twenty years ahead.

However, I believe that everything I am about to discuss will be technically possible well before the end of this century. The rate of progress will be limited by economic and political factors, not technological ones. When a new invention has a sufficiently great public appeal, the world insists on having it. Look at the speed with which the transistor revolution occurred. Yet what we now see on the technological horizon are devices with far greater potential, and human appeal, even than the ubiquitous transistor radio.

It must also be remembered that our ideas concerning the future of space technology are still limited by the present primitive state of the art. All of today's launch vehicles are expendable single-shot devices which can perform only one mission and are then discarded. It has been recognized for many years that space exploration, and space *exploitation*, will be practical only when the same launch vehicle can be flown over and over again, like conventional aircraft. The development of the reusable launch vehicle—the so-called “space shuttle”—will be the most urgent problem of the space engineers in the 1970's.

It is confidently believed that such vehicles will be operating by the end of the decade. When they do, their impact upon astronautics will be comparable to that of the famous DC-3 upon aeronautics. The cost of putting payloads—and men—into space will decrease from thousands, to hundreds, and then to tens of dollars per pound. This will make possible the development of multipurpose manned space-stations, as well as the deployment of very large and complex unmanned satellites which

it would be quite impractical to launch (from earth) in a single vehicle.

It must also be remembered that comsats are only one of a very large range of applications satellites; they may not even be the most important. The Earth Resources satellites will enormously advance our knowledge of this planet's capabilities, and the ways in which we may exploit them. The time is going to come when farmers, fishermen, public utility companies, departments of agriculture and forestry, etc., will find it impossible to imagine how they ever operated in the days before they had space-borne sensors continually scanning the planet.

The economic value of meteorological satellites—and their potential for the saving of life—has already been demonstrated. Another most important use of satellites, which has not yet begun, but which will have an economic value of billions of dollars a year, is their use for air-traffic control. It appears possible that the *only* real solution to the problem of air congestion, and the mounting risk of collisions, may be through navigational satellites which can track every aircraft in the sky.

All these multitudinous uses of space, although they will compete with comsats to some extent for the use of the available spectrum, will help to reduce the cost of their development and maintenance. The establishment of check-out and servicing facilities in space may therefore be economically feasible several years earlier than would be the case if the only space application was the communications satellite.

We see only one part of the picture if we focus our attention too closely on this single use of orbital facilities, and forget the synergistic effect of the others.

In dealing with telecommunications problems it is convenient—and often indeed essential—to divide the subject according to the type of transmission and equipment used. Thus we talk about radios, telephones, television sets, data networks, facsimile systems, etc., as though they were all quite separate things.

But this of course is a completely artificial distinction; to the communications satellite—which simply handles trains of electric impulses—they are all the same. For the purposes of this

discussion I am therefore looking at the subject from a different point of view, which may give a better overall picture. I am lumping all telecommunications devices together and am considering their *total* impact upon four basic units in turn. Those units are the home, the city, the state, and the world.

The Home

Note that I started with the home, not the family, as the basic human unit. Many people do not live in family groups, but everybody lives in a home. Indeed, in certain societies today the family itself is becoming somewhat nebulous around the edges, and among some younger groups is being replaced by the tribe—of which more anon. But the home will always be with us—as in the sense of Le Corbusier's famous phrase "the machine for living in." It is the components of this machine I would like to look at now.

There was once a time when homes did not have windows. It is difficult for those of us who do not live in caves or tents to imagine such a state of affairs. Yet within a single generation the home in the more developed countries has acquired a new window of incredible magical power—the TV set. What once seemed one of the most expensive luxuries became, in what is historically a twinkling of an eye, one of the basic necessities of life.

The television antenna swaying precariously above the slum-dweller's shack is a true sign of our times, and there is profound significance in the fact that during riots and similar disturbances one of the first targets of looters is the color TV set in the store window. What the book was to a tiny minority in earlier ages, the television set has now come to be for all the world.

It is true that, all too often, it is no more than a drug—like its poorer relative, the transistor radio, pressed to the ears of the blank-faced noise addicts one sees walking entranced through the city streets. But, of course, it is infinitely more than this, as was so well expressed by Buckminster Fuller when

he remarked that ours is the first generation to be reared by three parents.

All future generations will be reared by three parents. As René Maheu remarked recently, this may be one of the real reasons for the generation gap. We now have a discontinuity in human history. For the first time there is a generation that knows more than its parents, and television is at least partly responsible for this state of affairs.

Millions of words have been written on the educational use of television—and specifically television programs from communications satellites. But we must not overlook the enormous potential of educational *radio* programs, when high-quality global transmissions become possible. There are some subjects for which vision is essential, others in which it contributes little or nothing. As a television channel takes the spectrum space of several hundred voice channels, it should not be used if it is unnecessary. However, simple cost-effectiveness studies may be misleading. The hypnotic effect of the screen may be necessary to prevent the students' attention from wandering, even when all the essential information is going into his ears.

Anything we can imagine in the way of educational TV and radio can be done. As I have already remarked, the limitations are not technical, but economic and political. As for economic limitations, the cost of a truly global satellite educational system, broadcasting into all countries, would be quite trivial compared with the long-term benefits it could bring.

Let me indulge in a little fantasy. Some of the studies of educational comsat broadcasts—let us call them EDSAT—to developing countries indicate that the cost of the hardware may be of the order of \$1 per pupil per year.

I suppose there are about a billion children of school age on this planet, but the number of people who require education must be much higher than this, perhaps two billion. As I am only concerned with establishing orders of magnitude, the precise figures don't matter. But the point is that, for the cost of a few billion dollars a year, i.e., a few percent of the monies spent on armaments—one could provide a global EDSAT system which could drag this whole planet out of ignorance.

Such a project would seem ideally suited for UNESCO supervision, because there are great areas of basic education in which there are no serious disagreements. I do not think that ideological considerations play much part in the teaching of mathematics, chemistry, or biology—at least on the elementary level, though I must admit that some small cults still object to the doctrine that the earth is round.

The beauty of television, of course, is that to a considerable extent it transcends the language problem. I would like to see the development, by the Walt Disney studios or some similar organization, of visual educational programs which do not depend on language, but only upon sight, plus sound effects. I feel certain that a great deal can be done in this direction, and it is essential that such research be initiated as soon as possible, because it may take much longer to develop appropriate programs than the equipment to transmit and receive them.

Even the addition of language, of course, does not pose too great a problem, since this requires only a fraction of the bandwidth of the vision signal. And sooner or later we must achieve a world in which every human being can communicate directly with every other, because all men will speak, or at least understand, a handful of basic languages. The children of the future are going to learn several languages from that third parent in the corner of the living room.

Perhaps looking further ahead, a time is going to come when any student or scholar anywhere on earth will be able to tune in to a course in any subject that interests him, at any level of difficulty he desires. Thousands of educational programs will be broadcast simultaneously on different frequencies, so that any individual will be able to proceed at his own rate, and at his own convenience, through the subject of his choice.

This could result in an enormous increase in the efficiency of the educational process. Today, every student is geared to a relatively inflexible curriculum. He has to attend classes at fixed times, which very often may not be convenient. The opening up of the electromagnetic spectrum made possible by comsats will represent as great a boon to scholars and students, as did the advent of the printing press itself.

The great challenge of the decade to come is freedom from hunger. Yet starvation of the mind will one day be regarded as an evil no less great than starvation of the body. All men deserve to be educated to the limit of their capabilities. If this opportunity is denied them, basic human rights are violated.

This is why the forthcoming experimental use of direct broadcast EDSAT in India in 1972 is of such interest and importance. We should wish it every success, for even if it is only a primitive prototype, it may herald the global educational system of the future.

If I have spent so much time on this subject, it is because nothing is more important than education. H. G. Wells once remarked that future history would be a race between education and catastrophe. We are nearing the end of the race, and the outcome is still in doubt; hence the importance of any tool, any device, that can improve the odds.

The City

It is obvious that one of the results of the developments we have been discussing will be a breakdown of the barrier between home and school, or home and university—for in a sense the whole world may become one academy of learning. But this is only one aspect of an even wider revolution because results of the new communications devices will also break down the barrier between home and place of work. During the next decade we will see coming into the home a general purpose communications console comprising TV screen, camera, microphone, computer keyboard, and hard-copy readout device. Through this, anyone will be able to be in touch with any other person similarly equipped. As a result, for an ever-increasing number of people—in fact, virtually everyone of the executive level and above—almost all travel for business will become unnecessary. (Recently, a limited number of the executives of the Westinghouse Corporation, who were provided with primitive forerunners of this device, promptly found that their traveling decreased by 20 percent.)

This, I am convinced, is how we are going to solve the traffic

problem—and thus, indirectly, the problem of air pollution. More and more, the slogan of the future will be, “Don’t Commute—Communicate.” Moreover, this development will make possible—and even accelerate—another fundamental trend of the future.

It usually takes a genius to see the obvious, and once again I am indebted to Buckminster Fuller for the following ideas. One of the most important consequences of today’s space research will be the development of life support, and above all, *food regeneration* systems for long-duration voyages and for the establishment of bases on the moon and planets. It is going to cost billions of dollars to develop these techniques, but when they are perfected they will be available to everyone.

This means that we will be able to establish self-contained communities *quite independent of agriculture*, anywhere on this planet that we wish; perhaps one day even individual homes may become autonomous—closed ecological systems producing all their food and other basic requirements indefinitely.

This development, coupled with the communications explosion, means a total change in the structure of society. But because of the inertia of human institutions, and the gigantic capital investments involved, it may take a century or more for the trend to come to its inevitable conclusion. That conclusion is the death of the city.

We all know that our cities are obsolete, and much effort is now going into patching them up so that they work after some fashion, like thirty-year-old automobiles held together with string and wire. But we must recognize that, in the age that is coming, the city—except for certain limited applications—is no longer necessary.

The nightmare of overcrowding and traffic jams which we now endure is going to get worse, perhaps for our lifetimes. But beyond that is a vision of a world in which man is once again what he should be—a fairly *rare* animal, though in instant communication with all other members of his species. Marshall McLuhan has coined the evocative phrase “the global village” to describe the coming society. I hope “the global vil-

lage" does not really mean a global suburb, covering the planet from pole to pole.

Luckily, there will be far more space in the world of the future, because the land liberated at the end of the agricultural age—now coming to a close after ten thousand years—will become available for living purposes. I trust that much of it will be allowed to revert to wilderness, and that through this new wilderness will wander the electronic nomads of the centuries ahead.

The State

It is perfectly obvious that the communications revolution will have the most profound influence upon that fairly recent invention, the nation-state. I am fond of reminding American audiences that their country was created only a century ago by two inventions. Before those inventions existed it was impossible to have a United States of America. Afterwards, it was impossible *not* to have it.

Those inventions, of course, were the railroad and the electric telegraph. Russia, China—in fact, all modern states—could not possibly exist without them. Whether we like it or not—and certainly many people won't like it—we are seeing the next step in this process. History is repeating itself one turn higher on the spiral. What the railroad and the telegraph did to continental areas a hundred years ago, the jet plane and the communications satellite will soon be doing to the whole world.

Despite the rise of nationalism and the surprising resurgence of minority political and linguistic groups, this process may already have gone further than is generally imagined. We see, particularly among the young, cults and movements which transcend all geographical borders. The so-called "jet set" is perhaps the most obvious example of this transnational culture, but that involves only a small minority. In Europe, at least, the Volkswagen and Vespa sets are far more numerous and perhaps far more significant. The young Germans, Frenchmen, and Italians are already linked together by a common

communications network, and are impatient with the naïve and simple-minded nationalism of their parents which has brought so much misery to the world.

What we are now doing—whether we like it or not—indeed, whether we *wish* to or not—is laying the foundation of the first global society. Whether the final planetary authority will be an analogue of the federal systems now existing in the United States or the USSR I do not know. I suspect that, without any deliberate planning, such organizations as the world meteorological and earth resources satellite system, and the world communications satellite system (of which INTELSAT is the precursor) will eventually transcend their individual components. At some time during the next century they will discover, to their great surprise, that they are really running the world.

There are many who will regard these possibilities with alarm or distaste, and may even attempt to prevent their fulfilment. I would remind them of the story of the wise English king, Canute, who had his throne set upon the seashore so he could demonstrate to his foolish courtiers that even the king could not command the incoming tide.

The wave of the future is now rising before us. Gentlemen, do not attempt to hold it back. Wisdom lies in recognizing the inevitable—and cooperating with it. In the world that is coming, the great powers are not great enough.

The World

Finally, let us look at our whole world—as we have already done through the eyes of our moon-bound cameras. I have made it obvious that it will be essentially one world—though I am not foolish or optimistic enough to imagine that it will be free from violence and even war. But more and more it will be recognized that all terrestrial violence is the concern of the police—and of *no one else*.

And there is another factor which will accelerate the unification of the world. Within another lifetime, this will not be the only world, and that fact will have profound psychological impact upon all humanity. We have seen in this *annus mirabilis*

of 1969 the imprint of man's first footstep on the moon. Before the end of this century, we will experience the only other event of comparable significance in the foreseeable future.

Before I tell you what it is, ask yourselves what you would have thought of the moon landing, thirty years ago. Well, before another thirty have passed, we will see its inevitable successor—the birth of the first human child on another world, and the beginning of the *real* colonization of space. When there are men who do not look on earth as home, then the men of earth will find themselves drawing closer together.

In countless ways this process has already begun. The vast outpouring of pride, transcending all frontiers, during the flight of Apollo 11 was an indication of this. During those momentous days I was privileged to join Walter Cronkite and Commander Walter Shirra in the CBS-TV coverage of the mission. Cronkite had previously interviewed President Johnson after his retirement, and this fascinating interview disclosed the most remarkable example of the unifying effect of space exploration I have ever encountered. I would like to pass it on to you now.

After the moon-circling flight of Apollo 8 in December, 1968, President Johnson sent every head of state a copy of the famous photograph of the earth rising beyond the edge of the moon. To quote Mr. Johnson: "The response I got to that letter and that picture is truly amazing. The leaders of the world wrote me and thanked me for my thoughtfulness, and expressed great admiration and approbation at what we had done in using space for peaceful purposes."

Then, to the great surprise of Walter Cronkite, President Johnson produced, with evident pride, the personal card of President Ho Chi Minh. He remarked: "Even after I'd returned to the ranch in May, there came a response from Hanoi from Ho Chi Minh thanking me for sending him this picture and expressing his appreciation for this act."

I can think of no better example of the way in which space can put our present tribal squabbles in their true perspective.

Here manned space exploration and the unmanned applications satellites reinforce one other. And it is here that the com-

munications satellites can do their greatest service to mankind. For we are now about to turn back the clock, to the moment in time when the human race was divided.

Whether or not one takes it literally, the myth of the Tower of Babel has an extraordinary relevance for our age. Before that time, according to the book of Genesis (and indeed according to some anthropologists), the human race spoke with a single tongue. That time may never come again, but the time will come, and through the impact of comsats, when there will be two or three world languages which all men will share. Far higher than the misguided architects of the Tower of Babel ever could have imagined—36,000 kilometers above the equator—the rocket and communications engineers are about to undo the curse that was then inflicted upon our ancestors. So let me end by quoting the relevant passage from the eleventh chapter of Genesis, which I think could be a motto for this conference, and for our hopes of the future.

And the Lord said: Behold they are one people and they have all one language, and this is only the beginning of what they will do, and nothing that they propose to do now will be impossible for them.

Further Reading

General References

- Berelson, Bernard, and Janowitz, Morris, eds. *Reader in Public Opinion and Communication*, 2nd ed. Glencoe, Ill.: The Free Press, 1966.
Fifty-four well-chosen articles, including section on research methods.
- Dance, F. E. X., ed. *Human Communication Theory: Original Essays*. New York: Holt, Rinehart and Winston, 1967.
A collection of papers examining communication theory and research from the perspective of various disciplines, including psychology, anthropology, organizational theory, speech, philosophy, and sociology.
- Dexter, Lewis Anthony, and White, David Manning, eds. *People, Society, and Mass Communications*. New York: The Free Press, 1964.
Thirty papers dealing with such topics as the communicator and his audience, sociological perspectives on mass communications, and mass communication, conflict, and the strategy of persuasion.
- Paris-Stanford Studies in Communication, 1962*. Paris and Stanford: Institut Français de Presse, Université de Paris, and Institute for Communication Research, Stanford University, 1962.
Six essays on different facets of communication research, including papers on law and the mass communication media, science and the public mind, information-seeking, international information, communication's role in generating support for public education, and violence in the mass media.
- Schramm, Wilbur, ed. *Mass Communications*, 2nd ed. Urbana: University of Illinois Press, 1960.
Selections covering development of mass communication, control and support, process, content, audiences, effects, and an appendix on facts and figures.
- . *The Science of Human Communication*. New York: Basic Books, 1963.
A collection of eleven essays providing a lucid introduction to the science of human communication, including such topics as the

- social effects of mass communication, television's effect on children, mass media and personal influence, and the impact of communication on voting behavior.
- Schramm, Wilbur, et al., eds. *The Handbook of Communication*. Chicago: Rand McNally, 1971.
Collection of "state of the art" papers on various areas of communication research.
- Smith, Alfred G. *Communication and Culture*. New York: Holt, Rinehart and Winston, 1966.
Fifty-five articles dealing with communication theory, syntactics, semantics, and pragmatics.
- Thayer, Lee, ed. *Communication Theory and Research*. Springfield, Ill.: Charles C. Thomas, 1967.
Proceedings of the First International Symposium on Communication Theory and Research. Includes papers and discussions of scholars from such diverse disciplines as linguistics, social psychology, literary theory, child development, communication theory, speech, journalism, and information technology.
- Yu, Frederick T. C. *Behavioral Sciences and the Mass Media*. New York: Russell Sage Foundation, 1968.
Proceedings of a conference among social scientists and journalists. Contains sections on public and mass media uses of the behavioral sciences, social issues and the mass media, and journalists and behavioral scientists.

Development, Structure, and Function of the Media

- Agee, Warren K., ed. *Mass Media in a Free Society*. Lawrence: University Press of Kansas, 1969.
Six essays, by media specialists, on the role of the mass media in a democratic society.
- Cohen, Bernard C. *The Press and Foreign Policy*. Princeton: Princeton University Press, 1963.
Relationship between Washington correspondents and U.S. foreign policy.
- Emery, Edwin; Ault, Phillip H.; and Agee, Warren K. *Introduction to Mass Communications*, 3rd ed. New York: Dodd, Mead and Company, 1970.
An introductory survey of mass communications containing a section on each of the mass communications industries and professions.

Friendly, Fred W. *Due to Circumstances beyond Our Control* . . .
New York: Random House, 1967.

A critical analysis of the commercial television industry by a man intimately concerned with its development.

Peterson, Theodore; Jensen, Jay W.; and Rivers, William L. *The Mass Media and Modern Society*. New York: Holt, Rinehart and Winston, 1965.

How the U.S. mass communication media developed, how they operate in American society, and why they operate as they do.

Rivers, William L. *The Opinion Makers: The Washington Press Corps*. Boston: Beacon Press, 1965.

Examines the role of the Washington press corps in influencing public opinion and governmental policy.

Rivers, William L., and Schramm, Wilbur. *Responsibility in Mass Communication*, 2nd ed. New York: Harper and Row, 1969.

An authoritative examination of the relationship between mass media and the public and mass media and government, covering such issues as freedom and government control, public interest and "the right to know," censorship and public protection.

Siebert, Fred S.; Peterson, Theodore; and Schramm, Wilbur. *Four Theories of the Press*. Urbana: University of Illinois Press, 1963.

An examination of the authoritarian, libertarian, social responsibility, and Soviet Communist concepts of what the press should be and do.

Skornia, Harry J. *Television and Society*. New York: McGraw-Hill, 1965.

A critical examination of the structure and regulation of the U.S. broadcast industry and its impact on U.S. society.

Steinberg, Charles S., ed. *Mass Media and Communication*. New York: Hastings House, 1966.

Articles dealing with the development, significance, and impact of the mass media in society.

Aspects of the Communication Process

Berlo, David K. *The Process of Communication*. New York: Holt, Rinehart and Winston, 1960.

Develops a model of the communication process.

Boulding, Kenneth E. *The Image: Knowledge in Life and Society*. Ann Arbor: University of Michigan Press, 1956.

An interesting discussion of how living systems process and organize information, and how the resulting "image" directs behavior. Brown, Roger. *Words and Things*. New York: The Free Press, 1958.

An excellent analysis of how people come to use language.

Doob, Leonard W. *Communication in Africa: A Search for Boundaries*. New Haven: Yale University Press, 1961.

A fascinating examination of the communication process in Africa, concentrating on twelve critical variables which affect communication, including the communicator, his goal, the basic and extended media, the site, the restrictions, and the communication itself.

Katz, Daniel. "Psychological Barriers to Communication." *Annals of the American Academy of Political and Social Science* (March, 1947).

Excellent treatment of some of the perceptual problems of communication.

Miller, George A. *Language and Communication*. New York: McGraw-Hill, 1951.

A psychological approach to linguistics and verbal communication.

———. *The Psychology of Communication*. New York: Basic Books, 1967.

Seven essays dealing with man as an information-processing and information-gathering system.

Morris, Charles. *Signs, Language, and Behavior*. New York: Prentice-Hall, 1946.

One of the classics of semantic analysis.

Ogden, Charles K., and Richards, Ivar A. *The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism*. New York: Harcourt, Brace, 1936.

Standard treatment of the subject.

Osgood, Charles E.; Suci, George J.; and Tannenbaum, Percy H. *The Measurement of Meaning*. Urbana: University of Illinois Press, 1957.

An empirical approach to the measurement of meaning using the semantic differential.

Shannon, Claude E., and Weaver, Warren. *The Mathematical Theory of Communication*. Urbana: University of Illinois Press, 1949.

- Shannon states the theory in mathematical terms; Weaver discusses some of its implications for nonmathematicians.
- Stephenson, William. *The Play Theory of Mass Communication*. Chicago: University of Chicago Press, 1967.
Presents a theory of mass communication from the standpoint of the play element inherent in mass media use.
- Wiener, Morton, and Mehrabian, Albert. *Language within Language: Immediacy, a Channel in Verbal Communication*. New York: Appleton-Century-Crofts, 1968.
A model for looking at the process of verbal communication.

Channels and Audiences

- DeFleur, Melvin L., and Larsen, Otto N. *The Flow of Information: An Experiment in Mass Communication*. New York: Harper, 1958.
A sociological study of the flow of mass-mediated information through society.
- Katz, Elihu, and Lazarsfeld, Paul F. *Personal Influence: The Part Played by People in the Flow of Mass Communications*. New York: The Free Press, 1964.
The pioneering work on the relationship between interpersonal and mass communication. Contains the classic statement of the "two-step flow" hypothesis.
- Robinson, John P. "Television and Leisure Time." *Public Opinion Quarterly* 33 (1969): 210-22.
The role of television viewing during leisure time based on data from twelve countries.
- Schramm, Wilbur; Lyle, Jack; and Parker, Edwin B. *Television in the Lives of Our Children*. Stanford: Stanford University Press, 1961.
A comprehensive study of how North Americans use and respond to television. Also contains comparative data on use of the other mass media.
- Schramm, Wilbur; Lyle, Jack; and Pool, Ithiel de Sola. *The People Look at Educational Television*. Stanford: Stanford University Press, 1963.
The first comprehensive survey of the audiences of noncommercial television in the United States. Who watches ETV? What do they watch? Why do they watch? What is its impact?

Steiner, Gary A. *The People Look at Television: A Study of Audience Attitudes*. New York: Knopf, 1963.

A comprehensive study of how the American public uses, and what it feels about, television.

Wade, Serena, and Schramm, Wilbur. "The Mass Media as Sources of Public Affairs, Science and Health Knowledge." *Public Opinion Quarterly* 33 (1969): 197-209.

Characteristics of the audiences who use different media for information on these topics.

Zimmerman, Claire, and Bauer, R. A. "The Effect of an Audience upon What Is Remembered." *Public Opinion Quarterly* 20 (1956): 238-48.

Demonstrates that a reporter's expectations about an audience influences what he recalls about an event he is to report.

Attitude and Opinion Change

Goldhamer, Herbert. "Public Opinion and Personality." *American Journal of Sociology* 55 (1950): 346-54.

Some of the personality factors in opinion formation.

Hovland, Carl I., ed. *The Order of Presentation in Persuasion*. New Haven: Yale University Press, 1957.

One of the early products of the Yale studies in attitude change, this book presents a series of experiments on how various message components affect persuasion.

Hovland, Carl I., and Janis, Irving L., eds. *Personality and Persuasibility*. New Haven: Yale University Press, 1959.

Another of the Yale series of studies in attitude change, this volume concentrates on the relationship between various personality characteristics and persuasibility.

Hovland, Carl; Janis, Irving L.; and Kelley, Harold H. *Communication and Persuasion*. New Haven: Yale University Press, 1953.

Important volume, summarizing Yale communication studies through 1953. Includes studies on source credibility, on effect of fear-arousing appeals, on organization of persuasive arguments, on group membership as related to communication effects, on personality and susceptibility to persuasion, on participation as a factor in acquiring conviction, and on the retention of opinion change.

Hovland, Carl; Lumsdaine, A. A.; and Sheffield, Fred D. *Experi-*

ments on Mass Communication. Princeton: Princeton University Press, 1949.

Summary of the Army I and E Branch researches, during World War II, on effect of orientation films. Represented in this volume by paper on "one side" versus "two sides" in presentation. Includes also studies on long-time versus short-time effects, effect of audience participation, effects on men of different intellectual abilities, interest qualities, and others.

Hovland, Carl I., and Rosenberg, Milton J. *Attitude Organization and Change*. New Haven: Yale University Press, 1960.

Another of the Yale studies in attitude change, this volume presents work on various consistency theories of attitude change.

Insko, Chester A. *Theories of Attitude Change*. New York: Appleton-Century-Crofts, 1967.

The most detailed review of all of the various theories of attitude change and the research that has tested them.

Jones, Edward E., and Gerard, Harold B. *Foundations of Social Psychology*. New York: Wiley, 1967.

Chapter 12, on attitude change; also see Chapter 5 on the products of socialization.

Katz, Daniel. "The Functional Approach to the Study of Attitudes." *Public Opinion Quarterly* 24 (1960): 163-204.

Looks at attitude formation and change in terms of how attitudes serve the needs of individuals.

McGuire, William J. "The Nature of Attitudes and Attitude Change." In Gardner Lindzey and Elliot Aronson, eds., *The Handbook of Social Psychology*, 2nd ed., vol. 3, pp. 136-314. Reading, Mass.: Addison-Wesley, 1968.

An insightful and comprehensive review of attitude and attitude change theory and research.

Sherif, Muzafer, and Hovland, Carl I. *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. New Haven: Yale University Press, 1961.

The last book in the Yale series, it presents a number of studies which examine how the distance between a position held by a receiver and a position advocated by a persuasive message affects interpretation of messages and susceptibility to persuasion.

Wicker, Allan W. "Attitudes versus Actions: The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects." *Journal of Social Issues* 25 (1969): 41-78.

Reviews the research on the relationship between attitudes and behavior.

Communication Effects

- Arons, Leon, and May, Mark A. *Television and Human Behavior*. New York: Appleton-Century-Crofts, 1963.
A collection of proposals for research on the effects of mass communication.
- ✓ Baker, Robert K., and Ball, Sandra J., eds. *Violence and the Mass Media*. A staff report to the National Commission on the Causes and Prevention of Violence. Washington: U.S. Government Printing Office, 1969.
A comprehensive review of the development of the mass media in the United States, how they function, and what their effects are.
- Berkowitz, Leonard. *Aggression: A Social Psychological Analysis*. New York: McGraw-Hill, 1962.
Chapter 9, on violence in the mass media.
- Charters, W. W. *Motion Pictures and Youth*. New York: Macmillan, 1933.
Summary of the Payne Fund studies on effects of motion pictures.
- Greenberg, Bradley S., and Parker, Edwin B. *The Kennedy Assassination and the American Public: Social Communication in Crisis*. Stanford: Stanford University Press, 1965.
An important collection of studies of the role and impact of the mass media during and after the assassination of John F. Kennedy.
- Himmelweit, Hilde T.; Oppenheim, A. N.; and Vince, Pamela. *Television and the Child*. London: Oxford University Press, 1958.
The first major study of the effects of television on children.
- ✓ Klapper, Joseph T. *The Effects of Mass Communication*. Glencoe, Ill.: The Free Press, 1960.
An integrative review of research on the effects of all of the mass media of communication.
- Kraus, Sidney, ed. *The Great Debates: Background, Perspective, Effects*. Bloomington: Indiana University Press, 1962.
Includes ten papers providing background to the Kennedy-Nixon debates, and eight empirical studies of the effects of the debates.
- Leifer, Aimée Dorr; Collins, W. Andrew; Gross, Barbara M.; et al. "Developmental Aspects of Variables Relevant to Observational Learning." *Child Development* (1972), in press.

- What children of different ages learn from an entertainment film.
Maccoby, Eleanor E. "Effects of the Mass Media." In M. L. Hoffman and Lois W. Hoffman, eds., *Review of Child Development Research*, vol. 1, pp. 323-48. New York: Russell Sage Foundation, 1964.
Reviews research on the effects of mass media on children to 1964.
- Mendelsohn, Harold, and Crespi, Irving. *Polls, Television, and the New Politics*. Scranton, Pa.: Chandler, 1970.
An examination of public opinion polls and the effect on the electorate of broadcasting polls, election forecasts, and election results.
- Tannenbaum, Percy H. "What Effect When TV Covers a Congressional Hearing?" *Journalism Quarterly* 32 (1955): 434-40.
A field experiment which examines changes in information after a telecast.
- Weiss, Walter. "Effects of the Mass Media of Communication." In Gardner Lindzey and Elliot Aronson, eds., *The Handbook of Social Psychology*, 2nd ed., vol. 5, pp. 77-195. Reading, Mass.: Addison-Wesley, 1969.
A comprehensive review of most empirical research on the effects of the mass media.
- . "Mass Communication." *Annual Review of Psychology*. Palo Alto, Calif.: Annual Review Press, 1971.
Reviews research on the mass media and mass communication from 1967 to 1970.
- Wright, Charles R. *Mass Communication: A Sociological Perspective*. New York: Random House, 1959.
A brief introduction to sociological analysis of mass communication media, their audiences, their content, and their effects.

International Communication

- Davison, W. Phillips. *International Political Communication*. New York: Frederick A. Praeger, 1965.
Looks at the role of the mass communication media in international political communication.
- Dizard, Wilson P. *Television: A World View*. Syracuse: Syracuse University Press, 1966.
A review of the development of television around the world.
- Fischer, Heinz-Dietrich, and Merrill, John C., eds. *International*

Communication: Media—Channels—Functions. New York: Hastings House, 1970.

A collection of forty-one essays on various aspects of international communication. Selections cover such topics as communication systems and concepts, the flow of world news, freedom and restrictions of communication, national development and mass media, propaganda and political communication, supranational communication efforts.

Inkeles, Alex. *Public Opinion in Soviet Russia*. Cambridge: Harvard University Press, 1950.

Most complete study in print of organization and activities of communication system within the USSR.

Kracauer, Siegfried. "National Types as Hollywood Presents Them." *Public Opinion Quarterly* 13 (1949): 53-72.

The "world view" of our commercial films.

Lerner, Daniel. *Sykewar: Psychological Warfare against Germany, D-Day to VE-Day*. New York: Stewart, 1949.

The most complete treatment of Allied psychological warfare in Europe in World War II.

Lowenthal, Leo, ed. "International Communication Research." Special issue of *Public Opinion Quarterly* 16, no. 4 (1952).

Based on the research program of the Voice of America.

UNESCO. *News Agencies: Their Structure and Operation*. Paris: UNESCO, 1953.

Structure and operation of the chief news agencies of the world.

This and the following book are based largely on the reports of UNESCO's Technical Needs Commission, which present detailed information on press, radio, film, and news agencies in different countries.

———. *World Communications*, ed. Albert Shea. Paris: UNESCO, 1951.

Summary of press, radio, and film in countries of the world.

Communication and National Development

Lerner, Daniel. *The Passing of Traditional Society: Modernizing the Middle East*. New York: The Free Press, 1958.

An approach to modernization based on the development of mass communication media.

Lerner, Daniel, and Schramm, Wilbur, eds. *Communication and*

Change in the Developing Countries. Honolulu: East-West Center Press, 1967.

A collection of articles considering the various ways in which communication works to promote change in the developing countries.

Pye, Lucian W., ed. *Communications and Political Development.* Princeton: Princeton University Press, 1963.

An important collection of eighteen essays on how our knowledge of communication processes can be applied to the problems of political development in the new nations, represented in this volume by Lerner's paper on a communication theory of modernization.

Rao, Y. V. Lakshmana. *Communication and Development: A Study of Two Indian Villages.* Minneapolis: University of Minnesota Press, 1966.

How communication as a social process promotes the economic, social, and political development of a community.

Rogers, Everett M., with Shoemaker, F. Floyd. *Communication of Innovations: A Cross-Cultural Approach.* New York: The Free Press, 1971.

Draws together most of the research on the communication processes that make social change possible.

Rogers, Everett M., and Svenning, Lynn. *Modernization among Peasants: The Impact of Communication.* New York: Holt, Rinehart and Winston, 1969.

The role of communication in the modernization process.

Schramm, Wilbur. *Mass Media and National Development.* Stanford: Stanford University Press, 1964.

The role of information in the developing countries.

Schramm, Wilbur; Coombs, Philip H.; Kahnert, Friedrich; and Lyle, Jack. *The New Media: Memo to Educational Planners.* UNESCO: International Institute for Educational Planning, 1967.

Summary of and generalizations from the UNESCO case studies cited below.

Sommerlad, E. Lloyd. *The Press in Developing Countries.* Sydney: Sydney University Press, 1966.

A detailed examination of the problems of the press in the developing regions of the world.

UNESCO. *New Educational Media in Action: Case Studies for*

Planners. 3 vols. UNESCO: International Institute for Educational Planning, 1967.

A collection of twenty-three case studies detailing the experiences of various countries as they have attempted to use the new educational media—television, radio, film, programmed learning—for educational purposes.

Communication Research Methodology

Berelson, Bernard. *Content Analysis as a Tool of Communications Research*. Glencoe: The Free Press, 1952.

Most usable introduction to the subject.

Campbell, Donald T., and Stanley, Julian C. *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally, 1966.

Best available discussion of experimental design and research.

Gerbner, George; Holsti, Ole R.; Krippendorff, Klaus; Paisley, William J.; and Stone, Philip, eds. *The Analysis of Communication Content: Developments in Scientific Theories and Computer Techniques*. New York: Wiley, 1969.

Twenty-nine papers dealing with recent advances in content analysis.

Jahoda, Marie; Deutsch, Morton; and Cook, Stuart W. *Research Methods in Social Relations*. New York: Dryden, 1951.

Useful handbook covering a broad range of research methods.

Lindzey, Gardner, and Aronson, Elliot, eds. *The Handbook of Social Psychology*, 2nd ed., vol. 2. Reading, Mass.: Addison-Wesley, 1968.

This volume is devoted to research methods. Chapters of particular interest to communication research deal with attitude measurement, data analysis, systematic observational methods, interviewing, and content analysis.

Nafziger, Ralph O., and White, David Manning, eds. *Introduction to Mass Communications Research*, 2nd ed. Baton Rouge: Louisiana State University Press, 1963.

Methodological techniques used in communication research.

Stephan, Frederick J., and McCarthy, Philip J. *Sampling Opinions: An Analysis of Survey Procedure*. New York: Wiley, 1963.

Excellent coverage of sampling and survey research.

Summers, Gene F., ed. *Attitude Measurement*. Chicago: Rand McNally, 1970.

A collection of essays detailing the various approaches to attitude measurement.

Webb, Eugene J.; Campbell, Donald T.; Schwartz, Richard D.; and Sechrest, Lee. *Unobtrusive Measures: Nonreactive Research in the Social Sciences*. Chicago: Rand McNally, 1966.

An approach to social science research based on multiple measurement techniques, including nonreactive data—e.g., data gathered from sources other than questionnaires and interviews.

Webb, Eugene J., and Salancik, Jerry R. "The Interview or the Only Wheel in Town." *Journalism Monographs*, 1966, no. 2.

Excellent presentation of interview techniques and interview data.

Bibliographies

Danielson, Wayne A., and Wilhoit, G. C., Jr. *A Computerized Bibliography of Mass Communication Research, 1944-64*. New York: Magazine Publishers Association, 1967.

Hansen, Donald A., and Parsons, J. Herschel. *Mass Communication: A Research Bibliography*. Santa Barbara: The Glendessary Press, 1968.

Smith, Bruce Lannes, and Smith, Chitra M. *International Communication and Political Opinion: A Guide to the Literature*. Princeton: Princeton University Press, 1956.

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